



# Automotive Products Selector Guide

## AUDIO ASSPs

Device	Description	Power Dissipation Max (mW)	Supply Voltage Min (V)	Supply Voltage Max (V)	Operating Temp Min (°C)	Operating Temp Max (°C)	Package(s)
LC72725KV	RDS Demodulator	100	3	5.5	-40	85	SSOP-16
LC727103UJ	Mobile FM Multiplex Broadcast Demodulator IC with VICS WIDE Decoder	60	3	3.6	-40	105	SSOP-24
LC72717PW	Mobile FM Multiplex Broadcast Demodulator (DARC) Receiver	100	2.7	3.6	-40	85	SQFP-64
LC786965UW	Single Chip Digital Signal Processor LSI for Compact Disc Player	540	3	3.6	-40	85	SQFP-144

NOTE: Contact ON Semiconductor for AEC and PPAP status.

## AUDIO DSPs

Device	Description	DSP Core (bits)	MIPS	RAM (kB)	Audio Inputs	Audio Outputs	Package(s)
LC786820E	Compressed Audio Signal Processor IC with USB Host Controller	24	64	320	Analog x3, Digital x3	Analog stereo x1, Analog mono x1, Digital x1	PQFP-100, QIP-100E
LC786821E	Compressed Audio Signal Processor IC with USB Host Controller and Bluetooth	24	64	320	Analog x3, Digital x3	Analog stereo x1, Analog mono x1, Digital x1	PQFP-100, QIP-100E

NOTE: Contact ON Semiconductor for AEC and PPAP status.

## LCD DRIVERS

Device	Segments*			V <sub>DD</sub> (V)	Interface Voltage (V)	V <sub>LCD</sub> (V)	Output Ports	PWM Channels	Package(s)
	Static, 1/2 Duty	1/3 Duty, 1/4 Duty							
LC75843	24 to 28, 46 to 54	66 to 78, 84 to 100		4.0 - 6.3	3.3 or 5.0	VDD	4	3	TSSOP-36
	1/3 Duty	1/4 Duty							
LC75897	363 to 387	480 to 512		2.7 - 6.0	VDD	2.7 - 6.0	8	3	SQFP-144
LC75879	183 to 207	240 to 272		4.5 - 6.3	3.3 - 5.0	VDD	8	3	TQFP-80J
LC75829	147 to 159	192 to 208		4.5 - 6.0	3.3 or 5.0	VDD	4	–	SQFP-64
LC75806	198 to 231	260 to 304		4.5 - 6.0	3.3 or 5.0	VDD	9	–	TQFP-100
	1/8 Duty	1/9 Duty	1/10 Duty						
LC75818	Dot matrix (5 x 7) x 16 + 80	Dot matrix (5 x 8) x 16 + 80	Dot matrix (5 x 9) x 16 + 80	2.7 - 3.6	3.3 or 5.0	4.5 - 10.0	4	–	TQFP-120
LC75812	Dot matrix (5 x 7) x 13 + 65	Dot matrix (5 x 8) x 12 + 64	–	2.7 - 3.6	3.3 or 5.0	4.5 - 10.0	3	3	TQFP-100
	Static, 1/2 Duty	1/3 Duty, 1/4 Duty	LED Driver						
LC75805	38, 74	108, 140	48 channel	4.5 - 5.5	VDD	VDD	–	7	QIP-100E

NOTE: Contact ON Semiconductor for AEC and PPAP status. \* Number of segments depends on 'common v segment' configuration.

## MOTOR DRIVER

Device	Description	Operating Voltage Min (V)	Operating Voltage Max (V)	Output Current (mA)	T <sub>jmax</sub> (°C)	Regulator Voltage (V)	Control Type	LIN I/F	SPI	Current Limit	Over Voltage	Thermal Shutdown	Package(s)
LV8907UW	Three-phase BLDC sensorless pre driver with speed control	5.5	20	50	175	3.3 or 5.0	PWM	✓	✓	✓	✓	✓	SQFP48K

NOTE: Contact ON Semiconductor for AEC and PPAP status.

## LED DRIVERS

Device	Description	Topology	V <sub>I</sub> Min (V)	V <sub>I</sub> Max (V)	V <sub>O</sub> Max (V)	I <sub>O</sub> Max (mA)	f <sub>sw</sub> Typ (kHz)	LEDs in Series, Max	LEDs in Parallel, Max	Package(s)
CAV4201	350 mA High Efficiency LED Driver	Step-Down	7	–	32	350	1000	–	1	TSOT-23-5
NCV3065	1.5 A Constant Current Inverting Switching Regulator for HB-LEDs	Step-Down; Step-Up; Step-Up/Step-Down	3	40	40	1500	250	8	10	DFN-8, SOIC-8
NCV3066	1.5 A Constant Current Inverting Switching Regulator for HB-LEDs with Enable	Step-Down; Step-Up; Step-Up/Step-Down	3	40	40	1500	250; Up to 300	8	10	DFN-8, SOIC-8
NCV7680	Linear Current Regulator and Controller for LED Rear Combination Lamp	Linear	6	45	45	75	1	–	8	SOIC-16W EP
NCV7691	Current Controller for Automotive LED Lamps	Linear	4.5	18	18	1000	25	3	8	SOIC-8
NUD4001	High Current LED Driver	Linear	3.6	30	28	500	–	8	–	SOIC-8
NUD4011	Constant Current Regulator & LED Driver	Linear	3.6	–	200	70	–	100	–	SOIC-8
LC75760	LED Driver, 12-Channel, Constant Current	Linear	2.7	5.5	6.3	50	–	1	12	SSOP-24

NOTE: Contact ON Semiconductor for AEC and PPAP status.

## CONSTANT CURRENT REGULATORS

Device	Max V <sub>AK</sub> (V)	Cont I <sub>reg</sub> (mA)	I <sub>reg</sub> (%)	P <sub>D</sub> (mW)	Package(s)
NSV50010Y	50	10	±30	463	SOD-123
NSV45015W	45	15	±20	463	
NSV45030	45	30	±15	463	
NSV45025	45	25	±15	463	
NSV45020	45	20	±15	463	
NSV45030A	45	30	±10	463	
NSV45025A	45	25	±10	463	
NSV45020A	45	20	±10	463	
NSV45035JZ	45	35 - 70	±15	1389	SOT-223
NSV45020JZ	45	20 - 40	±15	1389	
NSI45030Z	45	30	±15	1389	
NSI45025Z	45	25	±15	1389	
NSI45030AZ	45	30	±10	1389	
NSV45025AZ	45	25	±10	1389	
NSV45060JD	45	60 - 100	±15	2700	DPAK
NSV45090JD	45	90 - 160	±15	2700	
NSC50150AD	50	150 - 350	±10	4200	
NSV50350AD	50	350	±10	11000	SMC
NSV50350AST3G	50	350	±10	–	
NSV50350AS	50	350	±10	5800	
NSV2050JB	120	50	±15	3000	SMB
NSV2030JB	120	30	±15	3000	
NSVC2020JBT3G	120	20	±15	–	
NSVC2030JBT3G	120	30	±15	–	
NSVC2050JBT3G	120	50	±15	–	
NSV2020JB	120	20	±15	3000	

NOTE: Contact ON Semiconductor for AEC and PPAP status.

## RELAY DRIVERS

Device	Configuration	Circuit Type *	Voltage (V)	Current (mA)	Package(s)
SZNUD3124	Single	MOSFET	24	150	SOT-23
SZNUD3124D	Dual	MOSFET	24	150	SC-74
SZNUD3160	Single	MOSFET	60	150	SOT-23
SZNUD3160D	Dual	MOSFET	60	150	SC-74

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. \* MOSFET: the driver circuit consists of a MOSFET combined with resistors and diodes.

## MOTOR DRIVER MODULES

Device	Description	V <sub>B</sub> Max	I <sub>out</sub> Max	R <sub>s</sub>	Pre-Driver	MOSFET	Current Limit	Thermal Shutdown	UVLO	DIAG Function	Package(s)
STK984-090A-E	3-Phase BLDC Motor Driver	40 V	20 A	3 mΩ	✓	✓	✓	✓	✓	✓	SIP-23
STK984-190-E	Power MOSFET Module	40V	30A	–		✓					SPCM24
FTC03V455A1	3-Phase MOSFET Inverter Automotive Power Module	40V	150A	0.53 mΩ							APMCB-A19
FAM65V05DF1	3-Phase IGBT Smart Power Module	650V	50A	–	✓		✓	✓	✓	✓	APM27-CAA

NOTE: Contact ON Semiconductor for AEC and PPAP status.

## MULTI-CHANNEL DRIVERS

Device	Description	SPI	Output Current	Current Limit Min (A)	R <sub>DS(on)</sub> @ 25°C	V <sub>s_op</sub> (V)	V <sub>s</sub> Peak Transient (V)	Sleep Mode	On-Chip Flyback Diode	Active Output Clamp	Parallel Inputs	Fault Reporting	Undervoltage Lockout	Open Load Detect	Current Limit	Overvoltage	Overtemperature	Low Duty Cycle Overcurrent Mode	Package(s)
NCV1413	Darlington Transistor Array	–	500 mA	–	–	30	50		✓	✓									SOIC-16
NCV7608	Configurable 8-Fold High/Low-Side Driver	16-bit	350 mA	0.8	1.2	3 - 28	40	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		SOIC-28, SSOP-36 EP
NCV7702B	Dual H-Bridge Driver	–	–	1	–	7 - 16	60	✓	✓		✓	✓			✓	✓	✓	✓	SOIC-24
NCV7708F	Dual Hex High/Low-Side Driver	16-bit	500 mA	1	0.8	5.5 - 40	40	✓	✓	✓		✓	✓	✓	✓	✓	✓		SSOP-24
NCV7718	Hex Half-Bridge Driver	16-bit	550 mA	0.8	1	4.5 - 40	40	✓	✓			✓	✓	✓	✓	✓	✓		SSOP-24
NCV7719	Octal Half-Bridge Driver	16-bit	550 mA	0.8	1	4.5 - 40	40	✓	✓			✓	✓	✓	✓	✓	✓		SSOP-24 EP
NCV7720	Deca Half-Bridge Driver	16-bit	550 mA	0.8	1	4.5 - 40	40	✓	✓			✓	✓	✓	✓	✓	✓		SSOP-24 EP
NCV7240	8x Low-Side Driver	16-bit	300 mA	0.6	1.5	(VDD) 4.5 - 5.5	(VDD) 5.5	✓	✓	✓	✓	✓		✓	✓		✓		SSOP-24
NCV7728	Hex Half-Bridge Driver	16-bit	550 mA	0.8	1	4.5 - 40	40	✓	✓			✓	✓	✓	✓	✓	✓		SSOP-24
NCV7751	12x Low-Side Driver	16/24/32-bit	300 mA	0.6	1.3	(VDD) 4.5 - 5.5	(VDD) 5.5	✓	✓	✓	✓	✓		✓	✓		✓		SSOP-24 EP
NCV7754	8x Low-Side Driver	16-bit	300 mA	0.5	0.8	(VDD) 4.5 - 5.5	(VDD) 5.5	✓	✓	✓	✓	✓		✓	✓		✓		SSOP-24

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## DOOR DRIVERS

Device	SPI	Safe Lock	Door Locking	Mirror Fold	Mirror X-Axis	Mirror Y-Axis	ECM	Mirror Defroster	LED Blinker	LED Floor Step Light (LED/Bulb)	Safety Light (LED/Bulb)	Protection (Over Voltage & Under Voltage)	Protection (Over Current, Under Load & Thermal)	Current Sense & PWM	Package(s)	
Front Door/Mirror	NCV7707	24-bit	0.15, 0.3 Ω	0.15 Ω	0.3 Ω	1.6 Ω	1.6 Ω	DAC + LS	0.1 Ω	1.4 Ω	0.3, 1.4 Ω	1.4 Ω	✓	✓	✓	SSOP-36
Back Door Lock	NCV7710	24-bit	–	0.15 Ω	–	–	–	–	–	–	–	–	✓	✓	✓	SSOP-36
Mirror Module	NCV7704	24-bit	–	–	–	1.6 Ω	1.6 Ω	–	0.1 Ω	1.4 Ω	0.3, 1.4 Ω	–	✓	✓	✓	SSOP-36
	NCV7705	24-bit	–	–	0.3 Ω	1.6 Ω	1.6 Ω	–	0.1 Ω	1.4 Ω	0.3, 1.4 Ω	0.6/1.4 Ω	✓	✓	✓	SSOP-36
	NCV7714	24-bit	–	–	–	1.6 Ω	1.6 Ω	DAC + LS	0.1 Ω	1.4 Ω	0.3, 1.4 Ω	–	✓	✓	✓	SSOP-36

NOTE: Contact ON Semiconductor for AEC and PPAP status.

## PRE-DRIVERS

Device	Description	Output Current	R <sub>DS(ON)</sub> @ 25°C	Sleep Mode	On-Chip Flyback Diode	Parallel Inputs	SPI	Fault Reporting	Undervoltage Lockout	Open Load Detect	Current Limit	Peak Transient (V)	Package(s)
NCV7513B	Hex Low-Side MOSFET Driver	3.6 mA	1.8 kΩ	✓		✓	✓	✓	✓	✓	✓	6.5	LQFP-32
NCV7517B	Hex Low-Side MOSFET Driver	18 mA	350 Ω	✓		✓	✓	✓	✓	✓	✓	6.5	LQFP-32
NCV7518	Hex Low-Side MOSFET Driver	18 mA	350 Ω	✓		✓	✓	✓	✓	✓	✓	5.8	QFN-32
NCV33152	High Speed Dual MOSFET Driver	1.5 A	—	✓	✓	✓						20	SOIC-8
NCV5104	Single Input High and Low Side Power MOSFET Driver	250/500 mA	30/10	✓					✓				SOIC-8
FAN3121	Single 9A High Speed Low Side Gate Driver	7.1/9.7 A							✓			20	SOIC-8
FAN3122	Single 9A High Speed Low Side Gate Driver	7.1/9.7 A							✓			20	SOIC-8
FAN3213	Dual 4A High Speed Low Side Gate Driver	2.8/4.3 A							✓			20	SOIC-8
FAN3214	Dual 4A High Speed Low Side Gate Driver	2.8/4.3 A							✓			20	SOIC-8
FAN3223	Dual 4A High Speed Low Side Gate Driver	2.8/4.3 A							✓			20	SOIC-8
FAN3224	Dual 4A High Speed Low Side Gate Driver	2.8/4.3 A							✓			20	SOIC-8
FAN3225	Dual 4A High Speed Low Side Gate Driver	2.8/4.3 A							✓			20	SOIC-8
FAN3226	Dual 2A High Speed Low Side Gate Driver	1.6/2.4 A							✓			20	SOIC-8
FAN3227	Dual 2A High Speed Low Side Gate Driver	1.6/2.4 A							✓			20	SOIC-8
FAN3228	Dual 2A High Speed Low Side Gate Driver	1.6/2.4 A							✓			20	SOIC-8
FAN3229	Dual 2A High Speed Low Side Gate Driver	1.6/2.4 A							✓			20	SOIC-8
FAN3216	Dual 2A High Speed Low Side Gate Driver	1.6/2.4 A							✓			20	SOIC-8
FAN3217	Dual 2A High Speed Low Side Gate Driver	1.6/2.4 A							✓			20	SOIC-8
FAN7080	Half Bridge 600V/600mA Gate Driver	300/600 mA							✓			600	SOIC-8
FAN7081	High Side 600V/500mA Gate Driver	250/500 mA							✓			600	SOIC-8
FAN7083	High Side 600V/400mA Gate Driver with Enable Pin	200/400 mA							✓			600	SOIC-8
FAN7085	High Side 300V/450mA Gate Driver with Cboot Recharge Path and Enable Pin	450 mA							✓			300	SOIC-8
FAN7171	High Side High Current 600V/4A Gate Driver	4 A							✓			600	SOIC-8
FAN7191	High Side and Low Side High Current 600V/4.5A Gate Driver	4.5 A							✓			600	SOIC-8
FAD7191M1X	High Side and Low Side High Current 600V/4.5A Gate Driver with Separate grounds and Enable pin	4.5 A							✓			600	SOIC-14
NCV5700	High Current IGBT Gate Driver - Standalone Full Featured	4/6 A						✓	✓			40	SOIC-16
NCV5701A	High Current IGBT Gate Driver - Standalone Active Miller Clamp	4/6 A						✓	✓			40	SOIC-8
NCV5701B	High Current IGBT Gate Driver - Standalone Negative Bias Supply	4/6 A						✓	✓			40	SOIC-8
NCV5701C	High Current IGBT Gate Driver - Standalone Separate High/Low Side Output	4/6 A						✓	✓			40	SOIC-8

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## LIN TRANSCEIVERS

Device	Description	Bus Speed (Baud)	ISO 9141	LIN 2.0/2.1/2.2	J2602	Sleep Mode Current (μA)	ESD Protection IEC 61000-4-2 (LIN pin)	Package(s)
AMIS-30600	LIN Transceiver	20 k	✓	✓	✓	55	6 kV	SOIC-8
NCV7321	LIN Transceiver	20 k	✓	✓	✓	10	>12 kV	SOIC-8
NCV7424	Quad LIN Transceiver	20 k	✓	✓	✓	30	>12 kV	TSSOP-16
NCV7329	LIN Transceiver	20 k	✓	✓	✓	10	>12 kV	SOIC-8
NCV7420	LIN Transceiver with Voltage Regulator (50 mA, 3.3 or 5.0 V)	20 k	✓	✓	✓	20	>12 kV	SOIC-14
NCV7425	LIN Transceiver with Voltage Regulator (150 mA, 3.3 or 5.0 V)	20 k	✓	✓	✓	20	>12 kV	SOIC-16W EP
NCV7428	LIN (low slope, normal slope) Transceiver with Voltage Regulator (70 mA, 3.3 or 5.0 V)	20 k	✓	✓	✓	25	>12 kV	SOIC-8
NCV7429	System Basis Chip with LIN, LS and HS Switches	20k	✓	✓	✓	30	>6 kV	TSSOP-20 EP

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## CAN TRANSCEIVERS

Device	Description	Standard	Sleepmode Current Max (µA)	Bus Speed Max	ESD Protection IEC 61000-4-2 (CAN pins)	Package(s)
NCV7349	High Speed, Low Power CAN Transceiver**	ISO11898-5	15	1 Mbps	>12 kV	SOIC-8
NCV7342	High Speed, Low Power CAN Transceiver	ISO11898-5	15	1 Mbps	>12 kV	SOIC-8, DFN-8
NCV7344	High Speed Low Power CAN, CAN FD Transceiver	ISO11898-2:2016	15	5 Mbps	>8 kV	SOIC-8, DFN-8
NCV7340	High Speed, Low Power CAN Transceiver	ISO11898-5	15	1 Mbps	>12 kV	SOIC-8
AMIS-42665	High Speed, Low Power CAN Transceiver	ISO11898-5	15	1 Mbps	4 kV (HBM)	SOIC-8
NCV7341	High Speed, Low Power CAN Transceiver	ISO11898-5	35	1 Mbps	8 kV	SOIC-14
NCV7441	Dual High Speed, Low Power CAN Transceiver	ISO11898-5	30	1 Mbps	8 kV	SOIC-14
NCV7446	Two channel High Speed, Low Power CAN, CAN FD Transceiver	ISO11898-2:2016	30	5 Mbps	8 kV	DFN-14
AMIS-42700	Dual High Speed CAN Transceiver	ISO11898-2	N/A*	1 Mbps	4 kV	SOIC-20
NCV7351	High Speed CAN Transceiver	ISO11898-2	N/A*	1 Mbps	>12 kV	SOIC-8
NCV7351F	High Speed CAN, CANFD Transceiver	ISO11898-2:2016	N/A*	2 Mbps	>12 kV	SOIC-8
AMIS-30660	High Speed CAN Transceiver	ISO11898-2	N/A*	1 Mbps	4 kV	SOIC-8
AMIS-30663	High Speed CAN Transceiver	ISO11898-2	N/A*	1 Mbps	4 kV	SOIC-8
AMIS-41682	Low Speed Fault Tolerant CAN Transceiver	ISO11898-3	60	250 kpbs	6 kV (HBM)	SOIC-14
AMIS-41683	Low Speed Fault Tolerant CAN Transceiver	ISO11898-3	60	250 kpbs	6 kV (HBM)	SOIC-14
NCV7356	Single Wire CAN Transceiver	J2411	60	40 kpbs	4 kV (HBM)	SOIC-14

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. \* Sleepmode not featured/implemented. \*\*Meets VeLIO test requirements.

## FlexRay™ TRANSCEIVERS

Product	Description	Bus Speed (Baud)	FlexRay Standard	Host Interface	ESD Protection IEC61000-4-2 (CAN pins)	Package(s)
NCV7381A	Clamp-30 FlexRay Transceiver	10 M	v3.0.1.	ERRN pin	>10 kV	SSOP-16
NCV7383	Clamp-15 FlexRay Transceiver	10 M	v3.0.1.	SPI	> 10 kV	TSSOP-14

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## SYSTEM BASIS CHIPS

Device	Description	Data Transmission Standard	I <sub>O</sub> Max (mA)	Number of Drivers	Number of Transceivers	V <sub>CC</sub> Min (mA)	V <sub>CC</sub> Max (mA)	Package(s)
NCV7420	System Basis Chip with LIN and Voltage Regulator (WAKE, INH)	LIN	50	0	1	5	26	SOIC-14
NCV7425	System Basis Chip with LIN and Voltage Regulator (WAKE, INH, RSTN)	LIN	150	0	1	5	28	SOIC-16W EP
NCV7428	LIN (low slope, normal slope) Transceiver with Voltage Regulator (70 mA, 3.3 or 5.0 V)	LIN	70	0	1	3.234, 4.9	3.366, 5.1	SOIC-8, DFN-8
NCV7429	System Basis Chip with LIN, LS and HS Switches	LIN	150	5	1	4.9	5.1	TSSOP-20 EP
NCV7430	System Basis Chip with LIN and RGB LED Driver	LIN	100	3	1	5.5	43	SOIC-14
NCV7462	System Basis Chip with LIN, CAN, 2 Voltage Regulators, and HS/LS Drivers	LIN; CAN	250	7	2	5	28	SSOP-36 EP
NCV7471	System Basis Chip with Dual LIN, CAN, Voltage Regulator, and Buck-Boost DC-DC	LIN; CAN	500	0	3	2.5	28	SSOP-36 EP
NCV7441	Dual High Speed, Low Power CAN Transceiver	CAN	NA	0	2	NA	NA	SOIC-14
NCV7450	CAN + LDO +HS Driver System Basis Chip	CAN	NA	1	1	4.75	5.25	TSSOP-16 EP
NCV7446	Two channel High Speed, Low Power CAN, CAN FD Transceiver	CAN/CANFD	NA	0	2	NA	NA	DFN-14
AMIS-42700/70	Dual High Speed CAN Transceiver	CAN	NA	0	2	NA	NA	SOIC-20

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## OPERATIONAL AMPLIFIERS

Device	Channels	V <sub>S</sub> Min (V)	V <sub>S</sub> Max (V)	I <sub>Q</sub> /Channel (mA)	GBW (MHz)	V <sub>OS</sub> Max (mV)	V <sub>OS</sub> Drift (μV/°C)	I <sub>B</sub> (nA)	CMRR (dB)	e <sub>N</sub> (nV/√Hz)	Rail to Rail	Features	Package(s)
NCV2002	1	0.9 - 7	0.48	0.9	1.2	6	8	0.01	82	100	I/O	Shutdown, Ultra-Low VS	TSOP-6
NCV2003/32/34	1, 2, 4	1.7 - 5.5	0.3	7	8	4	2	0.001	70	20	Output	High GBW & Slew Rate	SOT-23-5, SOIC-8, Micro8, TSSOP-8, SOIC-14
NCV20061/2	1, 2	1.8 - 5.5	0.14	3	0.45	3	1	0.001	80	20	I/O	Low IQ & Rail-Rail I/O	Micro8, SOIC-8, TSSOP-8
NCV20071/2/4	1, 2, 4	2.7 - 36	0.41	3	2.7	3	2	0.005	111	20	Output	36V Rail-to-rail Output	SOIC-8, Micro8, TSSOP-8, SOIC-14, TSSOP-14
NCV20081/2	1, 2	1.8 - 5.5	0.05	1.2	1.2	3	1	0.001	80	30	I/O	Low IQ & Rail-Rail I/O	Micro8, SOIC-8, TSSOP-8
NCV2902	4	3 - 32	1.2	1	–	7	7	90	70	–	–	Low Cost	SOIC-14, TSSOP-14
NCV2904	2	3 - 32	0.75	1	–	7	7	45	70	–	–	Low Cost	SOIC-8, Micro8
NCV33072/4	2, 4	3 - 44	1.6	4.5	10	3	10	100	97	32	–	44V VS Range	SOIC-8, TSSOP-14
NCV33078/9	2, 4	5 - 18	2.1	16	7	2	2	300	100	4.5	–	Wide GBW, Low VOS & eN	SOIC-8, SOIC-14
NCV33172	2, 4	3 - 44	0.18	1.8	2.1	6.5	10	20	90	32	–	Low IQ & 44V VS range	SOIC-8, TSSOP-14
NCV33202/4	2, 4	1.8 - 12	0.9	2.2	1	6	2	80	90	20	I/O	High Output Current	SOIC-8, Micro8, SOIC-14, TSSOP-14
NCV33272/4A	2, 4	3 - 36	2.2	24	10	1	2	300	100	18	–	Wide GBW, VS range	SOIC-8, SOIC-14, TSSOP-14
NCV5652	2	3.3 - 13.2	6	0.35	–	5	2	200	80	–	–	500mA Output Current	UDFN-12
NCV7101	1	1.8 - 10	1	1	1.2	9	8	0.001	60	140	I/O	Ultra-Low IB	SOT-23-5
NCV833	2	10 - 36	2	15	7	5	2	300	100	4.5	–	44V VS Range, Low eN	SOIC-8
NCV952	2	2.7 - 26	0.9	3	1	8	2	35	80	25	I/O	26V Rail-to-rail I/O	TSSOP-8
NCV2333	2	1.8 - 5.5	0.21	0.27	0.1	0.03	0.04	60	123	62	I/O	High Accuracy	Micro8, SOIC-8, UDFN-8
NCV333A	1	1.8 - 5.5	0.21	0.35	0.1	0.03	0.03	60	123	62	I/O	High Accuracy	SC-88A, SC-70-5, TSOP-5, SOT-23-5
NCS4333	4	1.8 - 5.5	0.21	0.35	0.1	0.03	0.095	60	123	62	I/O	High Accuracy	SOIC-14

NOTE: Contact ON Semiconductor for AEC and PAPP status.

## COMPARATORS

Device	Channels	V <sub>S</sub> Min (V)	V <sub>S</sub> Max (V)	I <sub>Q</sub> /Channel (μA)	t <sub>RESP</sub> (H-L) (μs)	V <sub>OS</sub> Max (mV)	Input Range (V)	I <sub>OUT</sub> (mA)	Output Type	Features	Package(s)
NCV2393	2	2.7	16	6	0.8	–	Vee to Vdd-1.5	20	Open Drain	Ultra-Low I <sub>Q</sub>	SOIC-8
NCV2200	1	0.85	6	10	0.5	5	Vee to Vdd	70	Complementary	Low I <sub>Q</sub>	SOT-23-5, SC-70
NCV2202	1	0.85	6	10	0.5	5	Vee to Vdd	70	Open Drain	Low I <sub>Q</sub>	SOT-23-5, SC-70
NCV331	1	2.7	5	40	0.6	9	Vee to Vdd-0.7	23	Open Drain	Low I <sub>Q</sub> , Low Cost	SOT-23-5
NCV2903	2	2	36	200	1.5	7	Vee to Vdd-1.5	16	Open Collector	36 V, Low Cost	SOIC-8, Micro8
NCV2901	4	3	36	200	1.3	7	Vee to Vdd-1.5	16	Open Collector	36 V, Low Cost	SOIC-14, TSSOP-14, Bare Die
NCV391	1	2	36	500	0.5	9	Vee to Vdd-1.5	16	Open Collector	36 V, Fast t <sub>RESP</sub>	SOT-23-5
TL331V	1	2	36	500	0.35	9	Vee to Vdd-1.5	16	Open Collector	36 V, Fast t <sub>RESP</sub>	TSOP-5 / SOT-23-5
NCV2250	1	1.8	5.5	150	74	6	Vee to Vdd	50	Push Pull	Fast t <sub>RESP</sub>	SOT-23-5, SC-70
NCV2252	1	1.8	5.5	150	74	6	Vee to Vdd	50	Open Collector	Fast t <sub>RESP</sub>	SOT-23-5, SC-70

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## CURRENT SENSE AMPLIFIERS

Device	Channels	Gain (V/V)	Gain Error Max (%)	V <sub>S</sub> Min (V)	V <sub>S</sub> Max (V)	V <sub>CM</sub> (V)	I <sub>Q</sub> Typ (mA)	Bandwidth Typ (-3dB)	V <sub>OS</sub> Max (mV)	V <sub>OS</sub> Drift Max (μV/°C)	Operating Temp Range (°C)	CMRR Typ (dB)	Package(s)
NCV210R	1	200	±1.5	2.2	26	-0.3 to 26	0.04	0.04	±0.05	1.5	-40 to 125	135	SC-88-6, SC-70-6, SOT-363-6, UQFN-10
NCV211R	1	500	±1.5	2.2	26	-0.3 to 26	0.04	0.025	±0.05	1.5	-40 to 125	135	SC-88-6, SC-70-6, SOT-363-6
NCV213R	1	50	±1.5	2.2	26	-0.3 to 26	0.04	0.09	±0.15	1.5	-40 to 125	120	SC-88-6, SC-70-6, SOT-363-6, UQFN-10
NCV214R	1	100	±1.5	2.2	26	-0.3 to 26	0.04	0.06	±0.09	1.5	-40 to 125	135	SC-88-6, SC-70-6, SOT-363-6, UQFN-10

NOTE: Contact ON Semiconductor for AEC and PAPP status.

## EEPROMs

Interface Protocol	Device	Density	Organization	Temperature Range	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	f <sub>clk</sub> Max (MHz)	Package(s)	
I2C	CAV24M01	1 Mb	128k x 8	-40 to +125°C (Grade 1)	2.5	5.5	1	SOIC-8, TSSOP-8	
	CAV24C512	512 kb	64k x 8		2.5	5.5	1	SOIC-8, TSSOP-8	
	CAV24C256	256 kb	32k x 8		2.5	5.5	1	SOIC-8, TSSOP-8	
	CAV24C128	128 kb	16k x 8		2.5	5.5	1	SOIC-8, TSSOP-8	
	CAV24C64	64 kb	8k x 8		2.5	5.5	0.4	SOIC-8, TSSOP-8	
	CAV24C32	32 kb	4k x 8		2.5	5.5	0.4	SOIC-8, TSSOP-8	
	CAV24C16	16 kb	2k x 8		2.5	5.5	0.4	SOIC-8, TSSOP-8	
	CAV24C08	8 kb	1k x 8		2.5	5.5	0.4	SOIC-8, TSSOP-8	
	CAV24C04	4 kb	512 x 8		2.5	5.5	0.4	SOIC-8, TSSOP-8	
	CAV24C02	2 kb	256 x 8		2.5	5.5	0.4	SOIC-8, TSSOP-8	
	N24C64	64 kb	8k x 8		-40 to +125°C (Grade 1)	2.5	5.5	1	US-8
	N24C32	32 kb	4k x 8			2.5	5.5	1	US-8
	N24C16	16 kb	2k x 8			2.5	5.5	1	US-8
	N24C08	8 kb	1k x 8			2.5	5.5	1	US-8
N24C04	4 kb	512 x 8	2.5	5.5		1	US-8		
N24C02	2 kb	256 x 8	2.5	5.5		1	US-8		
SPI	CAV25M01	1 Mb	128k x 8	-40 to +125°C (Grade 1)	2.5	5.5	10	SOIC-8, TSSOP-8	
	CAV25512	512 kb	64k x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	CAV25256	256 kb	32k x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	CAV25128	128 kb	16k x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	CAV25640	64 kb	8k x 8		2.5	5.5	10	SOIC-8, TSSOP-8, TDFN-8	
	CAV25320	32 kb	4k x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	CAV25160	16 kb	2k x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	CAV25080	8 kb	1k x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	CAV25040	4 kb	512 x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	CAV25020	2 kb	256 x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	CAV25010	1 kb	128 x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	NV25640	64 kb	8k x 8	-40 to +150°C (Grade 0)	2.5	5.5	10	SOIC-8, TSSOP-8	
	NV25320	32 kb	4k x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	NV25160	16 kb	2k x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	NV25080	8 kb	1k x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	NV25040	4 kb	512 x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	NV25020	2 kb	256 x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	NV25010	1 kb	128 x 8		2.5	5.5	10	SOIC-8, TSSOP-8	
	NV25512	512 kb	64k x 8	-40 to +125°C (Grade 1)	1.8	5.5	10	UDFN-8 Wettable Flank	
	NV25256	256 kb	32k x 8		1.8	5.5	10	UDFN-8 Wettable Flank	
	NV25128	128 kb	16k x 8		2.5	5.5	10	UDFN-8 Wettable Flank	
	NV25640	64 kb	8k x 8		2.5	5.5	10	UDFN-8 Wettable Flank	
	NV25320	32 kb	4k x 8		2.5	5.5	10	UDFN-8 Wettable Flank	
	NV25160	16 kb	2k x 8		1.8	5.5	10	UDFN-8 Wettable Flank	
	NV25080	8 kb	1k x 8		1.8	5.5	10	UDFN-8 Wettable Flank	
	NV25040	4 kb	512 x 8		1.8	5.5	10	UDFN-8 Wettable Flank	
NV25020	2 kb	256 x 8	1.8		5.5	10	UDFN-8 Wettable Flank		
NV25010	1 kb	128 x 8	1.8		5.5	10	UDFN-8 Wettable Flank		
Microwire	CAV93C86	16 kb	2k x 8 / 1k x 16		-40 to +125°C (Grade 1)	2.5	5.5	2	SOIC-8, TSSOP-8
	CAV93C76	8 kb	1k x 8 / 512 x 16	2.5		5.5	2	SOIC-8, TSSOP-8	
	CAV93C66	4 kb	512 x 8 / 256 x 16	2.5		5.5	2	SOIC-8, TSSOP-8	
	CAV93C56	2 kb	256 x 8 / 128 x 16	2.5		5.5	2	SOIC-8, TSSOP-8	
	CAV93C46	1 kb	128 x 8 / 64 x 16	2.5		5.5	2	SOIC-8, TSSOP-8	

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## SWITCHING REGULATORS & CONTROLLERS

Device	Buck	Boost	Controller	Synchronous	Output Current Max	Osc Freq	Output Voltage	Voltage Tolerance	Max Load Dump Voltage (V)	Sleepmode Current (Typ)	Low Iq Mode Typ Operating	Enable	Reset	Delay	Sync In	Sync Out	Power Good	TSD	UVLO	Short Circuit	Current Limit	Package(s)	
NCV6356	✓				5 A	Up to 2.4 MHz	1.15, 1.2, 0.875/0.906 V	±2 %	6	0.8 µA	–							✓	✓	✓	✓	DFN-14*	
NCV3163	✓	✓			3.4 A	Up to 300 kHz	Adj	±2 %	40	7 mA	–							✓	✓	✓	✓	DFN-18, SOIC-16W EP	
NCV33163	✓	✓			3.4 A	Up to 250 kHz	Adj	±2 %	40	7 mA	–							✓	✓	✓	✓	SOIC-16W, PDIP-16	
NCV891330	✓				3 A	2 MHz	5 V	±2 %	45	–	30 µA	✓	✓					✓	✓	✓	✓	SOIC-8 EP	
NCV891130	✓				1 A	2 MHz	5 V	±2 %	45	–	30 µA	✓	✓					✓	✓	✓	✓	SOIC-8 EP	
NCV890200	✓				2 A	2 MHz	Adj	±2 %	40	1 µA	–	✓						✓	✓	✓	✓	SOIC-8 EP	
NCV890201	✓				2 A	2 MHz	Adj	±2 %	40	1 µA	–	✓			✓	✓		✓	✓	✓	✓	DFN-10*	
NCV890230	✓				2 A	2 MHz	Adj	±2 %	45	1 µA	–	✓						✓	✓	✓	✓	SOIC-8 EP	
NCV890231	✓				2 A	2 MHz	Adj	±2 %	45	1 µA	–	✓			✓	✓		✓	✓	✓	✓	DFN-10*	
NCV890204	✓				2 A	2 MHz	Adj	±2 %	40	1 µA	–	✓	✓	✓				✓	✓	✓	✓	DFN-10*	
NCV8855	PMU		✓	✓	2 A / Adj	170 kHz	Adj	±2 %	18	0.1 µA	–	✓			✓			✓	✓	✓	✓	QFN-40	
NCV33063AV	✓	✓			1.5 A	100 kHz	–	±2 %	40	7 mA	–										✓	✓	SOIC-8
NCV3063	✓	✓			1.5 A	Up to 200 kHz	Adj	–	40	7 mA	–							✓	✓	✓	✓	DFN-8, SOIC-8, PDIP-8	
NCV3064	✓	✓			1.5 A	Up to 300 kHz	Adj	–	40	85 µA	–	✓						✓	✓	✓	✓	DFN-8, SOIC-8, PDIP-8	
NCV3065	✓	✓			1.5 A	Up to 250 kHz	40	–	40	7 mA	–							✓	✓	✓	✓	DFN-8, SOIC-8, PDIP-8	
NCV3066	✓	✓			1.5 A	Up to 300 kHz	Adj	–	40	85 µA	–	✓						✓	✓	✓	✓	DFN-8, SOIC-8, PDIP-8	
NCV5171		✓			1.5 A	Up to 600 kHz	–	–	35	50 µA	–							✓	✓	✓	✓	SOIC-8	
NCV5173		✓			1.5 A	Up to 600 kHz	–	–	35	50 µA	–							✓	✓	✓	✓	SOIC-8	
CS51411	✓				1 A	260 kHz	Adj	±2 %	40	1 µA	–	✓			✓			✓		✓	✓	SOIC-8, DFN-18	
CS51412	✓				1 A	260 kHz	Adj	±2 %	40	1 µA	–	✓						✓		✓	✓	SOIC-8, DFN-18	
CS51413	✓				1 A	520 kHz	Adj	±2 %	40	1 µA	–	✓			✓			✓		✓	✓	SOIC-8, DFN-18	
CS51414	✓				1 A	520 kHz	Adj	±2 %	40	1 µA	–	✓						✓		✓	✓	SOIC-8	
NCP1546	✓				1 A	170 kHz	Adj	±2 %	40	1 µA	–	✓			✓			✓		✓	✓	SOIC-8, DFN-18	
NCP1547	✓				1 A	340 kHz	Adj	±2 %	40	1 µA	–	✓			✓			✓		✓	✓	SOIC-8, DFN-18	
NCV2575	✓				1 A	52 kHz	Adj, 5, 12	–	40	80 µA	–							✓	✓	✓	✓	D2PAK	
NCV51411	✓				1 A	260 kHz	Adj	±2 %	40	1 µA	–	✓			✓			✓		✓	✓	SOIC-8, SOIC-16W, DFN-18	
NCV8842	✓				1 A	170 kHz	Adj	±2 %	40	1 µA	–	✓			✓			✓		✓	✓	SOIC-8, SOIC-16W, DFN-18	
NCV8843	✓				1 A	340 kHz	Adj	±2 %	40	1 µA	–	✓			✓			✓		✓	✓	SOIC-8, SOIC-16W, DFN-18	
NCV8881	PMU				1 A	500 kHz (Adj)	Adj	±2 %	40	1 µA	–	✓	✓	✓	✓			✓	✓		✓	SOIC-16W EP	
NCV890100	✓				1 A	2 MHz	Adj	±2 %	40	1 µA	–	✓			✓	✓		✓	✓	✓	✓	SOIC-8 EP, DFN-8*	
NCV890101	✓				1 A	2 MHz	Adj	±2 %	40	1 µA	–	✓			✓	✓		✓	✓	✓	✓	DFN-10*	
NCV890130	✓				1 A	2 MHz	Adj	±2 %	45	1 µA	–	✓						✓	✓	✓	✓	SOIC-8 EP, DFN-8*	
NCV890131	✓				1 A	2 MHz	Adj	±2 %	45	1 µA	–	✓			✓	✓		✓	✓	✓	✓	DFN-10*	
NCV890103	✓				1 A	2 MHz	Adj	±2 %	40	1 µA	–	✓	✓	✓	✓			✓	✓	✓	✓	DFN-10*	
NCV890104	✓				1 A	2 MHz	Adj	±2 %	40	1 µA	–	✓	✓	✓				✓	✓	✓	✓	DFN-10*	
NCV896530	Dual			✓	1 A	2.25 MHz	Adj	±2 %	6	1 µA	–	✓						✓	✓	✓	✓	DFN-10*	
NCV2574	✓				0.5 A	52 kHz	Adj	–	40	80 µA	–							✓	✓	✓	✓	SOIC-16W	

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. \*Wettable flank DFN/QFN: visual inspection is sufficient to guarantee proper soldering - no X-ray inspection needed



## SWITCHING REGULATORS &amp; CONTROLLERS

Device	Buck	Boost	Controller	Synchronous	Output Current Max	Osc Freq	Output Voltage	Voltage Tolerance	Max Load Dump Voltage (V)	Sleepmode Current (Typ)	Low Iq Mode Typ Operating	Enable	Reset	Delay	Sync In	Sync Out	Power Good	TSD	UVLO	Short Circuit	Current Limit	Package(s)
NCV8851B	✓		✓	✓	Adj	500 kHz (Adj)	Adj	±2 %	40	1 µA	–	✓			✓		✓	✓	✓	✓		TSSOP-20
NCV8853	✓		✓		Adj	500 kHz (Adj)	Adj	±2 %	40	1 µA	–	✓			✓		✓	✓	✓	✓		SOIC-8
NCV8852	✓		✓		Adj	500 kHz (Adj)	Adj	±2 %	40	1 µA	–	✓			✓				✓	✓	✓	SOIC-8
NCV887100		✓	✓		Adj	170 kHz	Adj	±2 %	45	2 µA	–	✓			✓			✓	✓	✓	✓	SOIC-8
NCV887101		✓	✓		Adj	1 MHz	Adj	±2 %	45	2 µA	–	✓			✓			✓	✓	✓	✓	SOIC-8
NCV887102		✓	✓		Adj	1 MHz	Adj	±2 %	45	2 µA	–	✓			✓			✓	✓		✓	SOIC-8
NCV887103		✓	✓		Adj	340 kHz	Adj	±2 %	45	2 µA	–	✓			✓			✓	✓	✓	✓	SOIC-8
NCV887104		✓	✓		Adj	340 kHz	Adj	±2 %	45	2 µA	–	✓			✓			✓	✓	✓	✓	SOIC-8
NCV887000		✓	✓		Adj	50 kHz	Adj	±2 %	45	2 µA	–	✓			✓			✓	✓	✓	✓	SOIC-8
NCV887001		✓	✓		Adj	100 kHz	Adj	±2 %	45	2 µA	–	✓			✓			✓	✓	✓	✓	SOIC-8
NCV8873		✓	✓		Adj	1 MHz	Adj	±2 %	45	2 µA	–	✓			✓			✓	✓		✓	SOIC-8
NCV887600		✓	✓		Adj	170 kHz (Adj)	6.8 V	±1 %	45	–	11uA							✓		✓	✓	SOIC-8
NCV887601		✓	✓		Adj	170 kHz (Adj)	6.8 V	±1 %	45	–	11uA							✓		✓	✓	SOIC-8
NCV887700		✓	✓		Adj	170 kHz (Adj)	6.8 V	±1 %	45	–	11uA	✓						✓		✓	✓	SOIC-8
NCV887701		✓	✓		Adj	170 kHz (Adj)	6.8 V	±1 %	45	–	11uA	✓						✓		✓	✓	SOIC-8
NCV887720		✓	✓		Adj	170 kHz (Adj)	10 V	±1 %	45	–	11uA	✓						✓		✓	✓	SOIC-8
NCV887740		✓	✓		Adj	170 kHz (Adj)	12 V	±1 %	45	–	11uA	✓						✓		✓	✓	SOIC-8
NCV898031		✓	✓		Adj	2 MHz	Adj	±2 %	45	1 µA	–	✓						✓	✓		✓	SOIC-8
NCV3011	✓		✓	✓	–	400 kHz	–	±1 %	40	2.5 mA	–	✓			✓	✓	✓	✓	✓	✓	✓	TSSOP-14
NCV3012	✓		✓	✓	–	Up to 200 kHz	–	±1 %	40	2.5 mA	–	✓			✓	✓	✓	✓	✓	✓	✓	TSSOP-14
NCV3020	✓		✓	✓	–	300/600 kHz	–	±1.5 %	40	2.5 mA	–							✓	✓	✓	✓	SOIC-8
NCV3030	✓		✓	✓	–	1.2/2.4 MHz	–	±1.5 %	40	2.5 mA	–							✓	✓	✓	✓	SOIC-8
NCV3843B	✓	✓	✓		–	52 kHz	–	–	30	12 mA	–								✓		✓	SOIC-14, SOIC-8
NCV494	✓	✓	✓		–	200 kHz	–	±5 %	42	–	–								✓	✓	✓	SOIC-16
NCV8878		✓	✓		Adj	450 kHz	6.8 V	±2 %	45	12 µA	–	✓	✓	✓				✓	✓	✓	✓	SOIC-8
NCV890203	✓				2.0 A	2.0 MHz	Adj	±1.75 %	40	5 µA	–	✓	✓	✓				✓	✓	✓	✓	DFN-10*
NCV894530	✓			✓	1.2 A	2.1 MHz	Adj	±1.5 %	6	10 µA	–	✓			✓			✓	✓	✓	✓	DFN-10*
NCV894630	✓			✓	2.0 A	2.1 MHz	Adj	±1.5 %	6	5 µA	–	✓			✓			✓	✓	✓	✓	DFN-10*
NCV97310	PMU			✓	3.0 A	2 MHz	Fixed, Adj		45	6 µA	–	✓	✓	✓				✓	✓	✓	✓	QFN-32*
NCV97311	PMU			✓	3.0 A	2 MHz	Fixed, Adj		45	7 µA	–	✓	✓	✓				✓	✓	✓	✓	QFN-32*
NCV8872		✓	✓		Adj	675 kHz	Adj	±2 %	40	8 µA	–	✓		✓	✓			✓	✓	✓	✓	SOIC-8
NCV890430	✓			✓	0.6 A	2 MHz	2.5 V, 3.3 V, 5.0 V	±2 %	45	5 µA	–	✓	✓					✓	✓	✓	✓	DFN-8*
NCV891234	✓				2.0 A	2 MHz	3.3 V, 5.0 V	±2 %	45	9 µA	–	✓	✓		✓	✓		✓	✓	✓	✓	DFN-12*
NCV891334	✓				3.0 A	2 MHz	3.3 V, 5.0 V	±2 %	45	9 µA	–	✓	✓		✓	✓		✓	✓	✓	✓	DFN-12*

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. \* Wetside flank DFN/QFN: visual inspection is sufficient to guarantee proper soldering - no X-ray inspection needed

## SINGLE LINEAR VOLTAGE REGULATORS

Device	Output Voltage (V)	Tolerance (%)	Output Current	Dropout (Max)	Sleepmode Current (Max)	Quiescent Current [Max] @ Low Load (Load)	Enable	Reset (✓ = Adjustable)	Delay	Early Warning Flag/Monitor	Watchdog	Wakeup	Current Limit	Overvoltage	Overtemperature	Peak Transient (V)	Package(s)
NCV4294C	3.3, 5	±4	30 mA	0.25 V	–	170 µA (100 µA)							✓	✓		60	TSOP-5
NCV4295C	3.3, 5	±4	30 mA	0.25 V	–	170 µA (100 µA)		✓					✓	✓		60	TSOP-5
NCV4296-2C	3.3, 5	±4	30 mA	0.25 V	1 µA	170 µA (100 µA)	✓						✓	✓		60	TSOP-5
NCV8715	1.2, 1.5, 1.8, 2.5, 3.0, 3.3, 5	±2	50 mA	0.35 V	–	3.4 µA (100 µA)							✓	✓		24	SC-70, XDFN
NCV8716	1.2, 1.5, 1.8, 2.5, 3.0, 3.3, 5	±2	80 mA	0.5 V	–	3.4 µA (100 µA)							✓	✓		24	XDFN
NCV562	3.3	±2	80 mA	0.25 V	1 µA	2.5 µA (100 µA)	✓						✓	✓		6	SC-70
NCV563	1.5, 3.3	±2	80 mA	0.25 V	–	2.5 µA (100 µA)							✓	✓		6	SC-70
NCV553	5	±3	80 mA	0.8 V	–	6 µA (1 mA)							✓	✓		12	SC-82
CS8101	5	±2	100 mA	0.6 V	50 µA	140 µA (100 µA)	✓	✓					✓	✓	✓	60	SOIC-8, SOIC-20W
NCV317L	Adj	±4	100 mA	1.9 V (Typ)	–	–							✓	✓		40	SOIC-8, TO-92
NCV2931	Adj, 5	±5	100 mA	0.6 V	1 mA	1 mA (10 mA)	✓						✓	✓	✓	60	SOIC-8, DPAK-3, D2PAK-3
NCV2931A	Adj, 5	±3.8	100 mA	0.6 V	1 mA	1 mA (10 mA)	✓						✓	✓	✓	60	SOIC-8, SOT-223, DPAK-3
NCV2951	Adj, 5	±2.4	100 mA	0.45 V	–	120 µA (100 µA)	✓	✓					✓	✓		32	SOIC-8
NCV2951A	Adj, 3.3, 5	±1.5	100 mA	0.45 V	–	120 µA (100 µA)	✓	✓					✓	✓		32	SOIC-8
NCV4949A	5	±2	100 mA	0.5 V	–	260 µA (300 µA)		✓	✓	✓			✓	✓		40	SOIC-8, SOIC-8 EP, SOIC-20W
NCV612	1.5, 1.8, 2.5, 2.7, 2.8, 3.0, 3.1, 3.3, 5	±3	100 mA	0.3 V	1 µA	90 µA (1 mA)	✓						✓	✓		6	SC-70
NCV662	1.5, 1.8, 2.5, 2.7, 2.8, 3.0, 3.3, 5	±4	100 mA	0.3 V	1 µA	6 µA (1 mA)	✓						✓	✓		6	SC-82
NCV663	1.5, 1.8, 2.5, 2.7, 2.8, 3.0, 3.3, 5	±4	100 mA	0.3 V	–	6 µA (1 mA)							✓	✓		6	SC-82
NCV78LxxA	5, 8, 12, 15, 24	±4	100 mA	1.7 V (Typ)	–	–							✓	✓		30	SOIC-8, TO-92
NCV551	1.4, 1.5, 1.8, 2.5, 2.7, 2.8, 3.0, 3.1, 3.2, 3.3, 5	±3	150 mA	0.22 V	1 µA	8 µA (1 mA)	✓						✓	✓		12	TSOP-5
NCV4264-2	3.3, 5	±2	150 mA	0.5 V	–	70 µA (100 µA)							✓	✓		45	SOT-223, SOIC-8
NCV4264-2C	3.3, 5	±2	150 mA	0.5 V	–	70 µA (100 µA)							✓	✓		45	SOT-223
NCV4266	3.3, 5	±2	150 mA	0.5 V	10 µA	200 µA (1 mA)	✓						✓	✓		45	SOT-223
NCV4266-2C	3.3, 5	±2	150 mA	0.5 V	1 µA	70 µA (100 µA)	✓						✓	✓		45	SOT-223
NCV4269A	3.3, 5	±2	150 mA	0.5 V	–	250 µA (1 mA)		✓	✓	✓			✓	✓		60	SOIC-8, SOIC-8 EP, SOIC-14, SOIC-20W
NCV4269C	5	±2	150 mA	0.5 V	–	250 µA (1 mA)		✓	✓	✓			✓	✓		60	SOIC-14
NCV4279A	5	±2	150 mA	0.5 V	–	250 µA (1 mA)		✓	✓	✓			✓	✓		60	SOIC-8, SOIC-14
NCV4279C	5	±2	150 mA	0.5 V	–	250 µA (1 mA)		✓	✓	✓			✓	✓		60	SOIC-14
NCV4299	3.3, 5	±2	150 mA	0.5 V	1 µA	105 µA (1 mA)	✓	✓	✓	✓			✓	✓		60	SOIC-8, SOIC-14
NCV4299A	3.3, 5	±2	150 mA	0.5 V	1 µA	95 µA (100 µA)	✓	✓	✓	✓			✓	✓		60	SOIC-14, TSSOP-14 EP
NCV571	0.8, 0.9, 1.0, 1.2	±4	150 mA	0.45 V	1 µA	8 µA (150 mA)	✓						✓	✓	✓		TSOP-5, DFN-6
NCV8170	1.2, 1.5, 1.8, 2.5, 2.8, 3.0, 3.3	±2	150 mA	0.25 V	0.5 µA	0.9 µA (0 mA)	✓						✓	✓		6	XDFN-4, SOT-563
NCV8501	Adj, 2.5, 3.3, 5, 8, 10	±2	150 mA	0.6 V	30 µA	75 µA (100 µA)	✓	✓	✓	✓			✓	✓		60	SOIC-8, SOIC-16 EP
NCV8502	Adj, 2.5, 3.3, 5, 8, 10	±2	150 mA	0.6 V	–	75 µA (100 µA)		✓	✓	✓			✓	✓		60	SOIC-8, SOIC-16 EP
NCV8560	Adj., 1.3, 1.5, 1.8, 2.5, 2.8, 3.0, 3.3, 3.5, 5	±2	150 mA	0.125 V	1 µA	180 µA (150 mA)	✓						✓	✓		6	DFN-6, TSOP-5
NCV8660B	3.3, 5	±2	150 mA	0.6 V	–	40 µA (150 mA)		✓	✓				✓	✓		40	DPAK-5, SOIC-8
NCV8664	3.3, 5	±2	150 mA	0.6 V	–	30 µA (100 µA)							✓	✓		45	SOIC-8, SOT-223, DPAK-3

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. \*\* See data sheet for details.

## SINGLE LINEAR VOLTAGE REGULATORS

Device	Output Voltage (V)	Tolerance (%)	Output Current	Dropout (Max)	Sleepmode Current (Max)	Quiescent Current [Max] @ Low Load (Load)	Enable	Reset (✓ = Adjustable)	Delay	Early Warning Flag/Monitor	Watchdog	Wakeup	Current Limit	Overvoltage	Overtemperature	Peak Transient (V)	Package(s)
NCV8664C	3.3, 5	±2	150 mA	0.6 V	–	30 µA (100 µA)							✓	✓		45	SOT-223
NCV8665	5	±2	150 mA	0.6 V	–	40 µA (100 µA)		✓	✓				✓	✓		45	D2PAK-5, SOIC-8
NCV8667	5	±2	150 mA	0.6 V	1 µA	50 µA (150 mA)	✓	✓	✓	✓			✓	✓		45	SOIC-8, SOIC-14
NCV8668	3.3, 5	±2	150 mA	0.6 V	1 µA	44 µA (100 µA)	✓	✓	✓		✓		✓	✓		45	SOIC-8, SOIC-8 EP, SOIC-14
NCV8669	5	±2	150 mA	0.6 V	–	50 µA (150 mA)		✓	✓	✓			✓	✓		45	SOIC-14
NCV8768	5	±1.5, ±2	150 mA	0.6 V	1 µA	36 µA (100 µA)	✓	✓	✓		✓		✓	✓		45	SOIC-14
NCV8769	5	±2	150 mA	0.6 V	–	33 µA (150 mA)		✓	✓	✓			✓	✓		45	SOIC-14
NCV4263-2C	5	±2	200 mA	0.5 V	10 µA	1.3 mA (0 mA)	✓	✓✓	✓		✓		✓	✓		45	SOIC-8 EP, SOIC-14
NCV8570B	1.8, 2.5, 2.8, 3.0, 3.3	±2.5	200 mA	0.23 V	1 µA	110 µA (1 mA)	✓						✓	✓		6	DFN-6, TSOP-5
NCV8752	1.8, 2.8, 3, 3.3	±2	200 mA	0.2 V	1 µA	12 µA (0 mA)	✓	✓	✓				✓	✓		6	XDFN-6, TSOP-5
NCV8702	1.8, 2.8, 3, 3.3	±2	200 mA	0.2 V	1 µA	16 µA (0 mA)	✓						✓	✓		6	XDFN6, TSOP-5
NCV8160	1.8 - 5.14	±2	250 mA	0.16 V	1 µA	23 µA	✓						✓	✓		6	XDFN-4
NCV8163	1.20 - 5.3	±2	250 mA	0.08 V	1 µA	20 µA	✓						✓	✓		6	XDFN-4
NCV8114	0.9 - 3.6	±1	300 mA	0.27 V	1 µA	95 µA	✓						✓	✓		6	TSOP-5
NCV8130	0.8 - 2.1	±1.5	300 mA	0.175 V	1.5 µA	110 µA	✓						✓	✓		6	XDFN-6
NCV8133	0.8 - 2.1	±1.5	500 mA	0.3 V	1.5 µA	110 µA	✓						✓	✓		6	XDFN-6
NCV8720	0.8 - 2.1	±2	350 mA	0.11 V	2.0 µA	110 µA	✓						✓	✓		6	WDFN-6
NCV8161	1.8 - 5.14	±2	450 mA	0.12 V	1 µA	23 µA	✓						✓	✓		6	XDFN-4, TSOP-5
NCV8508B	3.3, 5	±3	250 mA	0.9 V	–	150 µA (150 mA)		✓	✓		✓	✓	✓	✓		60	SOIC-8 EP, D2PAK-7
NCV8518B	5	±2	250 mA	0.75 V	1 µA	150 µA (150 mA)	✓	✓	✓		✓	✓	✓	✓		45	SOIC-8 EP, SOIC-16 EP
NCV33275	3.3, 5	±2	300 mA	0.5 V	–	200 µA (0 mA)							✓	✓		13	SOT-223
NCV33375	1.8	±2	300 mA	0.5 V	4 µA	200 µA (0 mA)	✓						✓	✓		13	SOT-223
NCV8603	3.3	±2	300 mA	0.23 V	1 µA	145 µA (1 mA)	✓						✓	✓		6	TSOP-5
NCV8703	1.8, 2.8, 3, 3.3	±2	300 mA	0.3 V	2 µA	20 µA (0 mA)	✓						✓	✓		6	XDFN6, TSOP-5
NCV8674	5	±2	350 mA	0.6 V	–	38 µA (100 µA)							✓	✓		45	D2PAK-3
NCV8675	3.3, 5	±2, ±2.5	350 mA	0.6 V	–	50 µA (100 µA)		✓	✓				✓	✓		45	DPAK-5, D2PAK-5
NCV8770	5	±1.5, ±2	350 mA	0.875 V	–	28 µA (350 mA)		✓	✓				✓	✓		45	D2PAK-5, DPAK-5
NCV8772	3.3, 5	±1.5	350 mA	0.875 V	1 µA	30 µA (350 mA)	✓	✓**	✓				✓	✓		45	D2PAK-7, D2PAK-5, DPAK-5
NCV8774	3.3, 5	±1.5, ±2	350 mA	0.875 V	–	23 µA (350 mA)							✓	✓		45	DPAK-3
NCV8503	Adj, 2.5, 3.3, 5	±2	400 mA	0.6 V	1 µA	350 µA (100 µA)	✓	✓✓	✓	✓			✓	✓		60	SOIC-16 EP
NCV8504	Adj, 2.5, 3.3, 5	±2	400 mA	0.6 V	–	150 µA (100 µA)		✓✓	✓	✓			✓	✓		60	SOIC-16 EP
NCV8505	Adj, 2.5, 3.3, 5	±2	400 mA	0.6 V	1 µA	350 µA (100 µA)	✓	✓	✓				✓	✓		60	D2PAK-7
NCV8506	Adj, 2.5, 3.3, 5	±2	400 mA	0.6 V	–	150 µA (100 µA)		✓	✓				✓	✓		60	D2PAK-7
NCV4274A	2.5, 3.3, 5, 8.5	±2	400 mA	0.5 V	–	250 µA (1 mA)							✓	✓		60	SOT-223, DPAK-3, D2PAK-3
NCV4274C	3.3, 5	±2	400 mA	0.5 V	–	250 µA (1 mA)							✓	✓		60	DPAK-3
NCV4276B	Adj, 3.3, 5	±2	400 mA	0.5 V	10 µA	220 µA (1 mA)	✓						✓	✓		45	DPAK-5, D2PAK-5
NCV4276C	Adj, 3.3, 5	±2	400 mA	0.5 V	10 µA	220 µA (1 mA)	✓						✓	✓		45	DPAK-5, D2PAK-5
NCV4275A	3.3, 5	±2	450 mA	0.5 V	–	200 µA (1 mA)		✓	✓				✓	✓		45	DPAK-5, D2PAK-5
NCV4275C	3.3, 5	±2	450 mA	0.5 V	–	200 µA (1 mA)		✓	✓				✓	✓		45	DPAK-5, D2PAK-5
NCV4290	5	±2	450 mA	0.5 V	–	230 µA (1 mA)		✓	✓				✓	✓		45	DPAK-5, D2PAK-5

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. \*\* See data sheet for details.

## SINGLE LINEAR VOLTAGE REGULATORS

Device	Output Voltage (V)	Tolerance (%)	Output Current	Dropout (Max)	Sleepmode Current (Max)	Quiescent Current [Max] @ Low Load (Load)	Enable	Reset (✓/✓ = Adjustable)	Delay	Early Warning Flag/Monitor	Watchdog	Wakeup	Current Limit	Overvoltage	Overtemperature	Peak Transient (V)	Package (s)
NCV317M	Adj	±4	500 mA	2.2 V (Typ)	—	—							✓	✓		40	DPAK-3
NCV5500	Adj, 1.5, 3.3, 5	±4.9	500 mA	0.7 V	50 µA	500 µA (100 µA)	✓						✓	✓		18	SOIC-8, DPAK-5
NCV5501	1.5, 3.3, 5	±4.9	500 mA	0.7 V	—	500 µA (100 µA)							✓	✓		18	DPAK-3
NCV78Mxx	5, 8, 12, 15	±4	500 mA	**	—	**							✓	✓		35	DPAK-3, TO-220
NCV78MxxA	5	±4	500 mA	**	—	**							✓	✓		35	DPAK-3
NCV8141	5	±3	500 mA	1.5 V	50 µA	**	✓	✓	✓		✓		✓	✓	✓	60	D2PAK-7
NCV8535	Adj, 1.5, 1.8, 2.5, 2.8, 2.85, 3.0, 3.3, 5	±1.5	500 mA	0.34 V	1 µA	190 µA (100 µA)	✓						✓	✓		16	DFN-10
NCV8537	Adj, 1.8, 2.5, 3.3, 5.0	±1.5	500 mA	0.34 V	1 µA	190 µA (100 µA)	✓			✓			✓	✓		16	DFN-10
NCV8605	Adj, 1.5, 1.8, 2.5, 2.8, 3, 3.3, 5	±1.5	500 mA	0.2 V	—	145 µA (100 µA)							✓	✓		6	DFN-6
NCV8606	Adj, 1.5, 1.8, 2.5, 2.8, 3, 3.3, 5	±1.5	500 mA	0.2 V	1 µA	145 µA (100 µA)	✓						✓	✓		6	DFN-6
NCV8705	0.8 - 3.5V, ADJ	±2	500 mA	0.35 V	2.0 µA	25 µA	✓						✓	✓		6	WDFN-6, DFN-8, DFNW-8
NCV8177	0.8 - 2.1	-2.5/1.5	500 mA	0.22 V	1.5 µA	90 µA	✓						✓	✓		6	XDFN-4, WDFNW-8
CS8126	5	±3	750 mA	0.6 V	—	—		✓	✓				✓	✓	✓	60	D2PAK-7
NCV33269	Adj, 3.3, 5, 12	±2	800 mA	1.35 V	—	—							✓	✓		20	DPAK-3
NCV78xxA	5, 12	±4	1 A	**	—	—							✓	✓		35	D2PAK-3, TO-220
NCV78xx	5, 8, 12, 15	5%	1 A	**	—	—							✓	✓		35	DPAK-3, D2PAK-3, TO-220
NCV5661	Adj, 1.2, 1.5, 1.8, 2.5, 2.8, 3.0, 3.3	±2	1 A	1.3 V	300 µA	—	✓	✓					✓	✓		18	DPAK-5, DFN-6
NCV8186	1.2 - 3.9 V	±1	1 A	1.2 V	—	—	✓						✓	✓		6	DFN-8
NCV1117	Adj, 1.5, 1.8, 2, 2.5, 3.3, 5, 12	±2	1 A	1.2 V	—	—							✓	✓		20	DPAK-3, SOT-223
NCV317	Adj	±4	1.5 A	2.25 V (Typ)	—	—							✓	✓		40	D2PAK-3, TO-220
NCV565	Adj	±3	1.5 A	1.3 V	—	—							✓	✓		18	D2PAK-5
NCV57152	Adj	±2	1.5 A	0.52 V	5 µA	—	✓						✓	✓		18	D2PAK-5, DFN8
NCV59150	Adj, 1.8, 2.5, 2.8, 3.0, 3.3, 5.0	±1.5	1.5 A	0.5 V	5 µA	—	✓			✓			✓	✓		18	DFN-8, D2PAK-3, D2PAK-5
NCV59151	1.8, 2.5, 2.8, 3.0, 3.3, 5.0	±1.5	1.5 A	0.5 V	5 µA	—	✓	✓					✓	✓		18	DFN-8, D2PAK-3, D2PAK-5
NCV59152	Adj	±1.5	1.5 A	0.5 V	5 µA	—	✓						✓	✓		18	DFN-8, D2PAK-3, D2PAK-5
NCV59748	Adj	±2.0	1.5 A	0.165 V	50 µA	2000 µA	✓						✓	✓		6	DFN-10
NCV5662	Adj, 1.5	±2	2 A	1.3 V	300 µA	—	✓	✓					✓	✓		18	D2PAK-5
NCV57302	Adj	±2.5	3 A	0.52 V	5 µA	—	✓						✓	✓		18	D2PAK-5
NCV59300	1.8, 2.5, 2.8, 3.0, 3.3, 5.0	±2	3 A	0.5 V	5 µA	—	✓						✓	✓		18	D2PAK-5, D2PAK-3
NCV59301	1.8, 2.5, 2.8, 3.0, 3.3, 5.0	±2	3 A	0.5 V	5 µA	—	✓	✓					✓	✓		18	D2PAK-5
NCV59302	Adj	±2	3 A	0.5 V	5 µA	—	✓						✓	✓		18	D2PAK-5
NCV59744	Adj	±1	3 A	0.195 V	15 µA	2000 µA	✓						✓	✓		6	QFN-20
NCV5663	Adj, 1.5	±2	3 A	1.3 V	300 µA	—	✓	✓					✓	✓		18	D2PAK-5

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. \*\* See data sheet for details.

## DUAL AND MULTIPLE LINEAR VOLTAGE REGULATORS

Device	Output Voltage (V)	Tolerance (%)	Output Current (mA)	Dropout (Max)	Sleepmode Current (Max)	Quiescent Current [Max] @ Low Load (Load)	Reset	Delay	Sequenced	Automatic Switchover (ASO)	Early Warning Flag/Monitor	Current Limit	Overvoltage Shutdown	Overtemperature	Peak Transient (V)	Package(s)
NCV8509	5.0, 5.0, 3.3 2.6, 2.5, 1.8	±2 ±2	100 115	0.6 V –	–	175 µA (200 µA)	✓	✓	✓			✓		✓	50	SOIC-16 ePad
NCV5504	Adj 3.3	±2 ±2	250 250	0.4 V 0.4 V	–	450 µA (0 µA)						✓		✓	18	DPAK-5
NCV8152	1.2, 1.5, 1.8, 2.8, 3.0, 3.3 1.2, 1.8, 2.5, 2.8, 3.0, 3.3	±2.8 ±2.8	300 300	0.24 V 0.24 V	1 µA	200 µA (0 mA)	✓					✓		✓	6	XDFN-6
NCV8154	1.8, 3.0, 3.3 1.8, 2.8, 3.0, 3.3	±3 ±3	300 300	0.29 V 0.29 V	1 µA	200 µA (0 mA)	✓					✓		✓	6	DFN-10
NCV8614B	5 3.3 Adj	±2 ±2 ±2	100 300 400	0.5 V 1.5 V 2.5 V	0.5 µA	50 µA (70 µA)	✓	✓		✓	✓	✓	✓	✓	45	DFN-20

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## TRACKING REGULATORS

Device	Output Voltage	Tolerance	Output Current	Dropout (Max)	Sleepmode Current (Max)	Quiescent Current [Max] @ Low Load (Load)	Enable	Reset	Current Limit	Overvoltage Shutdown	Overtemperature	Peak Transient	Package(s)
NCV4250-2C	Tracking	±5 mV	50 mA	0.3 V	20 µA	150 µA (1 mA)	✓		✓		✓	45 V	TSOP-5
NCV8184	Tracking	±3 mV	70 mA	0.6 V	20 µA	70 µA (100 µA)	✓		✓		✓	45 V	DPAK-5, SOIC-8, SOIC-8 ePad
CS8182	Tracking	±10 mV	200 mA	0.6 V	55 µA	150 µA (100 µA)	✓		✓		✓	45 V	DPAK-5, D2PAK-5, SOIC-8 Fused
CS8361	Tracking 5 V	±25 mV ±2 %	250 mA 100 mA	0.7 V 0.6 V	200 µA	200 µA (300 µA)	✓	✓	✓	✓	✓	60 V	D2PAK-7, SOIC-16 Fused

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. \*\* See data sheet for details.

## CURRENT SENSE REGULATORS

Device	Output Voltage	Tolerance	Output Current (mA)	Max Dropout (V)	Sleepmode Current (Max)	Quiescent Current [Max] @ Low Load (Load)	Enable	Current Sense Output	Error Flag	Off State Diagnostics	Current Limit	Overtemperature	Peak Transient (V)	Package(s)
NCV47551	Adj	±3	20	0.5	10 µA	380 µA (100 µA)	✓	✓			✓	✓	45	SOIC-8
NCV47411	Dual Adj	±3	100	0.55	10 µA	370 µA (500 µA)	✓	✓			✓	✓	45	TSSOP-14 ePad
NCV47721	Adj	±3	200	0.5	10 µA	1 mA (500 µA)	✓	✓	✓	✓	✓	✓	60	TSSOP-14 ePad
NCV47821	Dual Adj	±3	200	0.5	10 µA	1 mA (500 µA)	✓	✓	✓	✓	✓	✓	60	TSSOP-14 ePad
NCV47722	High Side Switch	±3	250	0.4	10 µA	1.5 mA (500 µA)	✓	✓	✓	✓	✓	✓	60	TSSOP-14 ePad
NCV47822	Dual High Side Switch	±3	250	0.4	10 µA	1.5 mA (500 µA)	✓	✓	✓	✓	✓	✓	60	TSSOP-14 ePad
NCV47823	Dual High Side Switch w/ Adjustable Constant Current	±3	250	0.4	10 µA	1.5 mA (500 µA)	✓	✓	✓	✓	✓	✓	60	TSSOP-14 ePad
NCV47700	Adj	±6	350	0.5	10 µA	230 µA (1 mA)	✓	✓			✓	✓	45	SOIC-8, SOIC-8 EP
NCV47701	Adj	±3	350	0.5	10 µA	230 µA (1 mA)	✓	✓			✓	✓	45	SOIC-8, SOIC-8 EP
NCV47710	Adj	±6	350	0.5	10 µA	230 µA (1 mA)	✓	✓			✓	✓	45	SOIC-8, SOIC-8 EP
NCV47711	Adj	±3	350	0.5	10 µA	230 µA (1 mA)	✓	✓			✓	✓	45	SOIC-8, SOIC-8 EP

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## CHARGE PUMPS

Device	Buck	Boost	Pass Mode (LDO)	Output Current In Buck Mode	Output Current In Boost Mode	Output Current In Pass Mode	FSW	Output Voltage	Tolerance	Sleepmode Current (Typ)	Quiescent Current (Max) @ Low Load (Load)	Enable	Reset	Charge Pump Active Output	TSD	UVLO	Overvoltage	Short Circuit	Current Limit	Peak Transient (V)	Package(s)
NCV48220		✓	✓	–	Up to 150 mA	Up to 150 mA	450 kHz	5 V	±2 %	1 µA	40 µA (100 µA)	✓	✓		✓	✓	✓	✓	✓	45	SOIC-16W

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## LINEAR VOLTAGE REFERENCES

Device	Type	V <sub>(BR)</sub> Typ (V)	Tolerance (%)	I <sub>Q</sub> Typ (mA)	I <sub>R</sub> Min (mA)	V <sub>F</sub> Max (V)	Package(s)
SC431AVSN	Adjustable	2.5	1	0.04	0.04	36	SOT-23-3
NCV431A	Adjustable	2.495	1	0.5	1	36	Micro8; SOIC-8
NCV431B	Adjustable	2.495	0.4	0.5	1	36	Micro8; SOIC-8
NCV1009	Fixed	2.5	0.2	–	0.4	–	SOIC-8
NCP51460	–	3.3	1	0.14	20	30	SOT-23-3

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## DDR VOLTAGE REGULATORS

Device	Output Current (A)	V <sub>CC</sub> Range (V)	Applications	Package(s)
NCV51190	±1.5 A	1.5 - 2.5	DDR-2, DDR-3, DDR-4	DFN-8
NCV51198	±1.5 A	1.5 - 2.5	DDR, DDR-2, DDR-3	SOIC-8 EP
NCV51199	±2 A	1.5 - 5.5	DDR-2, DDR-3	SOIC-8 EP
NCV51510	±3 A	1.1 - 3.6	DDR, DDR-2, DDR-3, DDR-4	DFN-10
NCV51200	±3 A	1.5 - 3.5	DDR, DDR-2, DDR-3, DDR-4	DFN-10
NCV51400	±3 A	1.1 - 3.5	DDR, DDR-2, DDR-3, LPDDR-3, DDR-4, LPDDR-4	DFN-10

NOTE: Contact ON Semiconductor for AEC and PAPP status.

## MOSFETs

Device	Configuration	Polarity	V <sub>DSS</sub> (V)	Gate Level	R <sub>DS(on)</sub> Max @ 10 V (mΩ)	Q <sub>G</sub> @ 10 V Typ (nC)	Package(s)
NVD4C05N	Single	N	30	LL	4.1	31	DPAK
NVATS4A102PZ	Single	P	30	LL	18.5	34	ATPAK
NVATS4A101PZ	Single	P	30	LL	30	18.5	ATPAK
NVATS4A103PZ	Single	P	30	LL	13	47	ATPAK
NVATS4A104PZ	Single	P	30	LL	8.4	76	ATPAK
NVMFS4C01N	Single	N	30	LL	0.9	139	SO-8FL
NVMFS4C302N	Single	N	30	LL	1.15	11.6	SO-8FL
NVMFS4C308N	Single	N	30	LL	4.8	8.4	SO-8FL
NVMFS4C310N	Single	N	30	LL	6	9.7	SO-8FL
NVMFS4C03N	Single	N	30	LL	2.3	45.2	SO-8FL
NVMFS4C05N	Single	N	30	LL	3.4	30	SO-8FL
NVTFS4C05N	Single	N	30	SL	3.6	31	μ8FL
NVTFS4C06N	Single	N	30	SL	4.2	26	μ8FL
NVTFS4C08N	Single	N	30	SL	5.9	18.2	μ8FL
NVTFS4C10N	Single	N	30	SL	7.4	19.2	μ8FL
NVTFS4C13N	Single	N	30	SL	9.4	15.2	μ8FL
NVTFS4C25N	Single	N	30	SL	17	10.3	μ8FL
NVLUS4C12N	Single	N	30	LL	9	8.4	Power22
NVLUD4C26N	Dual	N	30	LL	21	5	Power22
NVLJD4007NZ	Dual	N	30	LL	7000	0.75	Power22
<b>40 V</b>							
FDB9403-F085	Single	N	40	SL	1.2	164	D2PAK
FDB9403L-F085	Single	N	40	LL	1.2	186	D2PAK
FDB9406-F085	Single	N	40	SL	1.8	107	D2PAK
FDB9406L-F085	Single	N	40	LL	1.8	121	D2PAK
FDB9409-F085	Single	N	40	SL	3.5	43	D2PAK
FDB9409L-F085	Single	N	40	LL	3.5	52	D2PAK
FDB9503L-F085	Single	P	40	LL	2.6	196	D2PAK
FDBL9401-F085	Single	N	40	SL	0.65	220	TO-LL
FDBL9401L-F085*	Single	N	40	LL	0.65	280	TO-LL
FDBL9403-F085	Single	N	40	SL	0.9	144	TO-LL
FDBL9403L-F085*	Single	N	40	LL	0.9	186	TO-LL
FDBL9406-F085	Single	N	40	SL	1.2	90	TO-LL
FDBL9406L-F085*	Single	N	40	LL	1.2	121	TO-LL
FDD9407-F085	Single	N	40	SL	1.8	86	DPAK
FDD9407L-F085	Single	N	40	LL	2	96	DPAK
FDD9409-F085	Single	N	40	SL	2.6	42	DPAK
FDD9409L-F085	Single	N	40	LL	2.6	52	DPAK
FDD9410-F085	Single	N	40	SL	4.1	24	DPAK
FDD9410L-F085	Single	N	40	LL	4.2	29	DPAK
FDD9411-F085	Single	N	40	SL	7.8	15	DPAK
FDD9411L-F085	Single	N	40	LL	7	18	DPAK
FDD9507L-F085	Single	P	40	LL	4.4	100	DPAK
FDD9509L-F085	Single	P	40	LL	8.6	55	DPAK
FDD9510L-F085*	Single	P	40	LL	14	32	DPAK
FDD9511L-F085*	Single	P	40	LL	21	21	DPAK
FDMS9508L-F085	Single	P	40	LL	4.9	91	PWR56
FDMS9509L-F085	Single	P	40	LL	8.1	55	PWR56
FDMS9510L-F085	Single	P	40	LL	14	32	PWR56
FDMS9511L-F085*	Single	P	40	LL	21	21	PWR56
NVATS5A106PLZ	Single	P	40	LL	25	29	ATPAK
NVATS5A107PLZ	Single	P	40	LL	17	47	ATPAK

NOTE: Contact ON Semiconductor for AEC and PAPP status. \* Pending 3Q18. \*\* Pending 4Q18.

## MOSFETs

Device	Configuration	Polarity	V <sub>DSS</sub> (V)	Gate Level	R <sub>DS(on)</sub> Max @ 10 V (mΩ)	Q <sub>G</sub> @ 10 V Typ (nC)	Package(s)
NVATS5A108PLZ	Single	P	40	LL	10.4	79.5	ATPAK
NVBLS0D5N04M8	Single	N	40	SL	0.57	220	TO-LL
NVBLS0D7N04M8	Single	N	40	SL	0.75	144	TO-LL
NVD5C434N	Single	N	40	SL	2.2	86	DPAK
NVD5C446N	Single	N	40	SL	3.5	38	DPAK
NVD5C454N	Single	N	40	SL	4.2	25	DPAK
NVD5C454NL	Single	N	40	LL	4	40	DPAK
NVD5C464N	Single	N	40	SL	5.8	19	DPAK
NVD5C464NL	Single	N	40	LL	5.8	30	DPAK
NVD5C478N	Single	N	40	SL	8.4	13	DPAK
NVD5C478NL	Single	N	40	LL	8	20	DPAK
NVD5C486N	Single	N	40	SL	18	10	DPAK
NVD5C486NL	Single	N	40	LL	16	15	DPAK
NVMFD5C446NL	Dual	N	40	LL	2.8	54	SO-8FL Dual
NVMFD5C462NL	Dual	N	40	LL	4.6	23	SO-8FL Dual
NVMFD5C466NL	Dual	N	40	LL	7.2	16	SO-8FL Dual
NVMFD5C470NL	Dual	N	40	LL	11.4	9	SO-8FL Dual
NVMFD5C446N	Dual	N	40	SL	3	28	SO-8FL Dual
NVMFD5C462N	Dual	N	40	SL	5.3	15	SO-8FL Dual
NVMFD5C466N	Dual	N	40	SL	8.5	10	SO-8FL Dual
NVMFD5C470N	Dual	N	40	SL	13	5	SO-8FL Dual
NVMFD5C478NL	Dual	N	40	LL	14.5	8	SO-8FL Dual
NVMFD5C478N	Dual	N	40	SL	14.7	7	SO-8FL Dual
NVMFS5C404N	Single	N	40	SL	0.7	128	SO-8FL
NVMFS5C404NL	Single	N	40	LL	0.75	181	SO-8FL
NVMFS5C406NL	Single	N	40	LL	0.77	166	SO-8FL
NVMFS5C406N	Single	N	40	SL	0.8	109	SO-8FL
NVMFS5C410N	Single	N	40	SL	0.92	86	SO-8FL
NVMFS5C410NL	Single	N	40	LL	0.9	143	SO-8FL
NVMFS5C423NL	Single	N	40	LL	2	50	SO-8FL
NVMFS5C426N	Single	N	40	SL	1.3	65	SO-8FL
NVMFS5C426NL	Single	N	40	LL	1.1	65	SO-8FL
NVMFS5C430N	Single	N	40	SL	1.7	47	SO-8FL
NVMFS5C430NL	Single	N	40	LL	1.5	70	SO-8FL
NVMFS5C442N	Single	N	40	SL	2.3	32	SO-8FL
NVMFS5C442NL	Single	N	40	LL	2.8	50	SO-8FL
NVMFS5C450N	Single	N	40	SL	3.3	23	SO-8FL
NVMFS5C450NL	Single	N	40	LL	2.8	35	SO-8FL
NVMFS5C456N	Single	N	40	SL	4.5	18	SO-8FL
NVMFS5C456NL	Single	N	40	LL	3.7	18	SO-8FL
NVMFS5C460N	Single	N	40	SL	5.3	13	SO-8FL
NVMFS5C460NL	Single	N	40	LL	4.5	23	SO-8FL
NVMFS5C466N	Single	N	40	SL	8.5	10	SO-8FL
NVMFS5C466NL	Single	N	40	LL	7.5	16	SO-8FL
NVMFS5C468N	Single	N	40	SL	13	5	SO-8FL
NVMFS5C468NL	Single	N	40	LL	10.3	7.3	SO-8FL
NVMTS0D4N04C*	Single	N	40	SL	0.44	250	Power88
NVMTS0D6N04C*	Single	N	40	SL	0.58	185	Power88
NVMTS0D7N04C*	Single	N	40	SL	0.74	123	Power88
NVMTS1D2N04C*	Single	N	40	SL	1.2	64	Power88
NVMFS2D3P04M8L*	Single	P	40	LL	2.3	196	SO-8FL
NVMFS3D0P04M8L*	Single	P	40	LL	3	128	SO-8FL

NOTE: Contact ON Semiconductor for AEC and PAPP status. \* Pending 3Q18. \*\* Pending 4Q18.



## MOSFETs

Device	Configuration	Polarity	V <sub>DSS</sub> (V)	Gate Level	R <sub>DS(on)</sub> Max @ 10 V (mΩ)	Q <sub>G</sub> @ 10 V Typ (nC)	Package(s)
NVMFS5A140PLZ	Single	P	40	LL	4.2	136	SO-8FL
FDWS9508L-F085	Single	P	40	LL	4.9	91	Power56
FDWS9509L-F085	Single	P	40	LL	8.1	55	Power56
FDWS9510L-F085	Single	P	40	LL	14	32	Power56
FDWS9511L-F085*	Single	P	40	LL	21	21	Power56
NVTFS9D6P04M8L*	Single	P	40	LL	9.6	214	μ8FL
NVTFS014P04M8L*	Single	P	40	LL	14	158	μ8FL
NVTFS052P04M8L*	Single	P	40	LL	52	96	μ8FL
NVMJS0D8N04CL*	Single	N	40	LL	0.83	162	LFPAK8
NVMJS0D9N04C*	Single	N	40	SL	0.9	162	LFPAK8
NVMJS0D9N04CL**	Single	N	40	LL	0.92	143	LFPAK8
NVMJS1D0N04C*	Single	N	40	SL	1	86	LFPAK8
NVMYS1D2N04CL*	Single	N	40	LL	1.2	74	LFPAK4
NVMJS1D2N04CL*	Single	N	40	LL	1.25	92	LFPAK8
NVMJS1D3N04C*	Single	N	40	SL	1.3	65	LFPAK8
NVMYS1D3N04C*	Single	N	40	SL	1.3	74	LFPAK4
NVMJS1D5N04CL*	Single	N	40	LL	1.55	70	LFPAK8
NVMJS1D7N04C**	Single	N	40	SL	1.7	47	LFPAK8
NVMYS2D1N04CL*	Single	N	40	LL	2.15	50	LFPAK4
NVMYS2D4N04C**	Single	N	40	SL	2.4	32	LFPAK4
NVMYS2D9N04CL**	Single	N	40	LL	2.9	35	LFPAK4
NVMYS3D5N04C**	Single	N	40	SL	3.5	23	LFPAK4
NVMYS3D8N04CL**	Single	N	40	LL	3.8	18	LFPAK4
NVMYS4D5N04C**	Single	N	40	SL	4.5	17	LFPAK4
NVMYS4D6N04CL**	Single	N	40	LL	4.6	23	LFPAK4
NVMYS5D3N04C**	Single	N	40	SL	5.3	15	LFPAK4
NVMYS7D3N04CL**	Single	N	40	LL	7.3	7	LFPAK4
NVMYS8D0N04C**	Single	N	40	SL	8	10	LFPAK4
NVMYS010N04CL**	Single	N	40	LL	10	7.3	LFPAK4
NVMYS011N04C**	Single	N	40	SL	11.8	7.3	LFPAK4
NVTFS5C453NL	Single	N	40	LL	0.74	141	μ8FL
NVTFS5C454NL	Single	N	40	LL	3.9	18	μ8FL
NVTFS5C466NL	Single	N	40	LL	7.3	16	μ8FL
NVTFS5C471NL	Single	N	40	LL	11.4	9	μ8FL
NVTFS5C478NL	Single	N	40	LL	15	3.8	μ8FL
<b>60 V</b>							
FDB86563-F085	Single	N	60	SL	1.8	126	D2PAK
FDB86566-F085	Single	N	60	SL	2.7	80	D2PAK
FDB86569-F085	Single	N	60	SL	5.6	35	D2PAK
NVD5C632NL	Single	N	60	LL	3	78	DPAK
FDD86567-F085	Single	N	60	SL	3.2	63	DPAK
NVD5C648NL	Single	N	60	LL	4.6	39	DPAK
FDD86569-F085	Single	N	60	SL	5.7	35	DPAK
NVD5C668NL	Single	N	60	LL	9.3	19	DPAK
FDD86580-F085	Single	N	60	SL	10	20	DPAK
FDD86581-F085	Single	N	60	SL	15	13	DPAK
NVD5C684NL	Single	N	60	LL	17.5	9	DPAK
NVD5C688NL	Single	N	60	LL	30	6	DPAK
NVATS5A304PLZ	Single	P	60	LL	6.5	250	ATPAK
NVATS5A302PLZ	Single	P	60	LL	13	115	ATPAK
NVATS5A114PLZ	Single	P	60	LL	16	92	ATPAK
NVATS5A113PLZ	Single	P	60	LL	29.5	55	ATPAK

NOTE: Contact ON Semiconductor for AEC and PAPP status. \* Pending 3Q18. \*\* Pending 4Q18.

## MOSFETs

Device	Configuration	Polarity	V <sub>DSS</sub> (V)	Gate Level	R <sub>DS(on)</sub> Max @ 10 V (mΩ)	Q <sub>G</sub> @ 10 V Typ (nC)	Package(s)
NVATS5A112PLZ	Single	P	60	LL	43	33.5	ATPAK
NVMFS5C604N	Single	N	60	LL	1.2	80	SO-8FL
NVMFS5C604NL	Single	N	60	LL	1.2	120	SO-8FL
NVMFS5C612NL	Single	N	60	LL	1.5	91	SO-8FL
NVMFS5C612N	Single	N	60	LL	1.65	64	SO-8FL
NVMFS5C628NL	Single	N	60	LL	2.4	52	SO-8FL
NVMFS5C638NL	Single	N	60	LL	3.2	43	SO-8FL
NVMFS5C645NL	Single	N	60	LL	4	34	SO-8FL
NVMFS5C646NL	Single	N	60	LL	4.7	38	SO-8FL
NVMFS5C670NL	Single	N	60	LL	6.1	20	SO-8FL
NVMFS5C673NL	Single	N	60	LL	9.2	20	SO-8FL
NVMFS5C677NL	Single	N	60	LL	TBD	TBD	SO-8FL
NVMFS5C680NL	Single	N	60	LL	26	5	SO-8FL
NVMFS5C682NL	Single	N	60	LL	21	5	SO-8FL
NVMFD5C650NL	Dual	N	60	LL	4	37	SO-8FL Dual
NVMFD5C668NL	Dual	N	60	LL	6.8	20	SO-8FL Dual
NVMFD5C672NL	Dual	N	60	LL	11.2	12	SO-8FL Dual
NVMFD5C674NL	Dual	N	60	LL	13.7	10	SO-8FL Dual
NVMFD5C680NL	Dual	N	60	LL	26	5	SO-8FL Dual
NVMFS5113PL	Single	P	60	LL	22	83	SO-8FL
NVC3S5A51PLZ	Single	P	60	LL	250	6	SC-59
NVTFS5C658NL	Single	N	60	LL	4.8	27	μ8FL
NVTFS5C670NL	Single	N	60	LL	6.3	20	μ8FL
NVTFS5C673NL	Single	N	60	LL	10	14	μ8FL
NVTFS5C680NL	Single	N	60	LL	25	5	μ8FL
NVTFS5116PL	Single	P	60	LL	52	25	μ8FL
NVTFS5124PL	Single	P	60	LL	260	6	μ8FL
FDBL86561-F085	Single	N	60	SL	1.1	170	TO-LL
FDBL86563-F085	Single	N	60	SL	1.5	130	TO-LL
FDBL86566-F085	Single	N	60	SL	2.4	80	TO-LL
NVMTS0D7N06CL*	Single	N	60	LL	0.75	215	Power88
NVMTS001N06CL	Single	N	60	LL	1	160	Power88
NVMTS001N06CL	Single	N	60	LL	1.1	160	Power88
NVC6S5A354PLZ*	Single	P	-60	LL	100	14	CPH-6
NVC6S5A444NLZ*	Single	N	60	LL	78	10	CPH-6
NVC3S5A51PLZ	Single	P	-60	LL	250	6	CPH-6
<b>80 V</b>							
NVMJS1D4N06CL*	Single	N	60	LL	1.4	91	LFPAK8
NVMJS1D6N06CL**	Single	N	60	LL	1.6	91	LFPAK8
NVMYS2D2N06CL*	Single	N	60	LL	2.2	64	LFPAK4
NVMJS2D5N06CL**	Single	N	60	LL	2.4	52	LFPAK8
NVMYS3D3N06CL**	Single	N	60	LL	3.3	42	LFPAK4
NVMYS4D1N06CL**	Single	N	60	LL	4.1	34	LFPAK4
NVMYS6D2N06CL**	Single	N	60	LL	6.2	20	LFPAK4
NVMYS9D3N06CL**	Single	N	60	LL	9.3	9.5	LFPAK4
NVMYS014N06CL**	Single	N	60	LL	14.5	10	LFPAK4
NVMYS021N06CL**	Single	N	60	LL	21	5	LFPAK4
NVMYS025N06CL**	Single	N	60	LL	30	6	LFPAK4
FDB86363-F085	Single	N	80	SL	2.4	131	D2PAK
FDB86366-F085	Single	N	80	SL	3.6	86	D2PAK
FDD86367-F085	Single	N	80	SL	4.2	68	DPAK
FDD86369-F085	Single	N	80	SL	7.9	34	DPAK

NOTE: Contact ON Semiconductor for AEC and PAPP status. \* Pending 3Q18. \*\* Pending 4Q18.

## MOSFETS

Device	Configuration	Polarity	V <sub>DSS</sub> (V)	Gate Level	R <sub>DS(on)</sub> Max @ 10 V (mΩ)	Q <sub>G</sub> @ 10 V Typ (nC)	Package(s)
FDD86380-F085	Single	N	80	SL	13.5	20	DPAK
FDD86381-F085	Single	N	80	SL	21	14	DPAK
NVMFS6H800N	Single	N	80	SL	2	82	S08FL
NVMFS6H801N	Single	N	80	SL	2.8	62	S08FL
NVMFS6H818N	Single	N	80	SL	3.8	50	S08FL
NVMFS6H824N*	Single	N	80	SL	5	35	S08FL
NVMFS6H836N*	Single	N	80	SL	7	24	S08FL
NVMFS6H848N*	Single	N	80	SL	9	18	S08FL
NVMFS6H852N*	Single	N	80	SL	14.5	11	S08FL
NVMFS6H858N*	Single	N	80	SL	21	7	S08FL
NVMFS6H864N*	Single	N	80	SL	31	5	S08FL
NVMTS0D7N06CL*	Single	N	60	LL	0.75	215	Pwr88
NVMTS001N06CL *	Single	N	60	LL	1	160	Pwr88
NVMTS001N06CL*	Single	N	60	LL	1.1	160	Pwr88
FDMS86368-F085	Single	N	80	SL	4.5	57	PWR56
FDMS86369-F085	Single	N	80	SL	7.5	35	PWR56
FDMS86380-F085	Single	N	80	SL	13.4	35	PWR56
FDMS86381-F085	Single	N	80	SL	22	14	PWR56
NVTFS6H850N	Single	N	80	SL	7.3	17	μ8FL
NVTFS6H854N*	Single	N	80	SL	14.5	11	u8FL
NVTFS6H860N*	Single	N	80	SL	21	7	u8FL
NVTFS6H880N*	Single	N	80	SL	31	5	u8FL
NVTFS6H888N*	Single	N	80	SL	50	3	u8FL
FDBL86361-F085	Single	N	80	SL	1.4	172	TO-LL
FDBL86363-F085	Single	N	80	SL	2	130	TO-LL
FDBL86366-F085	Single	N	80	SL	3	86	TO-LL
<b>100 V</b>							
FDB3632-F085	Single	N	100	SL	9	84	D2PAK
FDB3652-F085	Single	N	100	SL	16	41	D2PAK
FDB3672-F085	Single	N	100	SL	28	24	D2PAK
FDD86067-F085*	Single	N	100	SL	5	38	DPAK
FDD3672-F085	Single	N	100	SL	28	24	DPAK
FDD3682-F085	Single	N	100	SL	36	18.5	DPAK
NVATS68301PZ	Single	P	100	SL	75	55	ATPAK
NVMFS6B03NL	Single	N	100	LL	4	58	SO-8FL
NVMFS6B03N	Single	N	100	SL	4.8	58	SO-8FL
NVMFS6B05NL	Single	N	100	LL	5.6	44	SO-8FL
FDWS86068-F085*	Single	N	100	SL	5.8	31	PWR56
NVMFS6B05N	Single	N	100	SL	8	44	SO-8FL
FDWS86069-F085*	Single	N	100	SL	10	19	PWR56
NVMFS6B14NL	Single	N	100	LL	13	20	SO-8FL
NVMFS6B14N	Single	N	100	SL	15	20	SO-8FL
NVMFS6B25NL	Single	N	100	LL	25	12	SO-8FL
NVMFS6B75NL	Single	N	100	LL	29	11	SO-8FL
NVMFS6B85NL	Single	N	100	LL	45	8	SO-8FL
FDBL86062-F085	Single	N	100	SL	2	95	TO-LL
FDBL86063-F085	Single	N	100	SL	2.6	76	TO-LL
FDBL86066-F085*	Single	N	100	SL	2.8	46	TO-LL
NVMTS1D6N10MC**	Single	N	100	SL	1.6	107	Pwr88
NVMTSC1D6N10MC**	Single	N	100	SL	1.6	107	Pwr88DC
NVMTS002N10MC**	Single	N	100	SL	2	87	Pwr88
NVMTS2D5N10MC**	Single	N	100	SL	2.5	69	Pwr88
NVMTS003N10MC**	Single	N	100	SL	3	57	Pwr88

NOTE: Contact ON Semiconductor for AEC and PAPP status. \* Pending 3Q18. \*\* Pending 4Q18.

## MOSFETs

Device	Configuration	Polarity	$V_{DSS}$ (V)	Gate Level	$R_{DS(on)}$ Max @ 10 V (m $\Omega$ )	$Q_G$ @ 10 V Typ (nC)	Package(s)
<b>150 V</b>							
FDB075N15A-F085	Single	N	150	SL	7.5	80	D2PAK
FDB2532-F085	Single	N	150	SL	16	82	D2PAK
FDB2552-F085	Single	N	150	SL	36	39	D2PAK
FDB42AN15A0-F085	Single	N	150	SL	42	30	D2PAK
FDD86250-F085*	Single	N	150	SL	22	23	DPAK
FDD2572-F085	Single	N	150	SL	54	34	DPAK
FDBL86210-F085	Single	N	150	SL	6.3	70	TO-LL
<b>600 V</b>							
FCH47N60F-F085	Single	N	600	SL	75	190	TO-247-3L
FCH072N60F-F085	Single	N	600	SL	72	160	TO-247-3L
FCH104N60F-F085	Single	N	600	SL	104	139	TO-247-3L
<b>650 V</b>							
FCH041N65F-F085	Single	N	650	SL	41	304	TO-247-3L
FCH077N65F-F085	Single	N	650	SL	77	126	TO-247-3L
FCH190N65F-F085	Single	N	650	SL	190	63	TO-247-3L

NOTE: Contact ON Semiconductor for AEC and PAPP status. \* Pending 3Q18. \*\* Pending 4Q18.

## JFETs

Device	Configuration	$V_{GS}$ (V)	$I_{DSS}$ (mA)	$V_{GS(off)}$ (V)	$g_m$ (mS)	$C_{iss}$ (pF)	Package(s)
NSVJ2394SA3	Single	15	10-32	-1.5 to -0.3	38	10	SC-59
NSVJ3557SA3	Single	15	10-32	-1.5 to -0.3	35	10	SC-59
NSVJ3910SB3	Single	25	20-40	-1.8 to -0.6	40	6	CPH-3
NSVJ5908DSG5	Dual	15	10-32	-1.5 to -0.3	35	10	MCPH-5
NSVJ6904DSB6	Dual	25	20-40	-1.8 to -0.6	40	6	CPH-6

NOTE: Contact ON Semiconductor for AEC and PAPP status.

## SELF-PROTECTED MOSFETS

Device	Description	Channels	Package(s)
<b>LOW SIDE</b>			
NCV8401A	Low Side Protected MOSFET, 23 mΩ	1	DPAK
NCV8402A	Low Side Protected MOSFET, 165 mΩ	1	SOT-223
NCV8402AD	Dual Low Side Protected MOSFET, 165 mΩ	2	SOIC-8
NCV8403A	Low Side Protected MOSFET, 60 mΩ	1	SOT-223, DPAK
NCV8405A	Low Side Protected MOSFET, 100 mΩ	1	SOT-223, DPAK
NCV8406A	Low Side Protected MOSFET, 210 mΩ	1	SOT-223, DPAK
NCV8408	Low Side Protected MOSFET, 65 mΩ	1	SOT-223
NCV8440A	Clamped MOSFET, 95 mΩ	1	SOT-223
NIMD6001A	Dual N-Channel MOSFET w/Diagnostic Output 130 mΩ	2	SOIC-8
<b>HIGH SIDE</b>			
NCV8450A	High Side Protected MOSFET, 1 Ω	1	SOT-223
NCV8452	High Side Protected MOSFET, 200 mΩ	1	SOT-223
NCV8445	High Side Protected MOSFET w/Digital Diagnostics, 45 mΩ	1	SOIC-8
NCV8460A	High Side Protected MOSFET w/Digital Diagnostics, 60 mΩ	1	SOIC-8
NCV8461	High Side Protected MOSFET w/Digital Diagnostics, 350 mΩ	1	SOIC-8
NCV84160	High Side Protected MOSFET w/Current Sense, 160 mΩ	1	SOIC-8

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## Ignition IGBTs

Device	Clamp Voltage (V)	SCIS Energy (mJ)	I <sub>c</sub> @110°C (A)	V <sub>CE(sat)</sub> Max @25°C (V)	Package(s)
FGD3325G2-F085	250	330	41	25	T0-252
ISL9V5036P3-F085	360	500	31	1.6	T0-220
ISL9V5036S3	360	500	31	1.6	T0-262
FGB3236-F085	360	320	26	1.4	T0-263
FGI3236-F085	360	320	26	1.4	T0-263
ISL9V3036S3ST	360	300	17	1.6	T0-263
ISL9V5036S3ST	360	500	31	1.6	T0-263
FGD2736G3-F085	360	270	19	17	T0-252
FGP3040G2-F085	400	330	25.6	41	T0-220
FGP3440G2-F085	400	335	25	26.9	T0-220
ISL9V3040P3	400	300	17	1.6	T0-220
FGD3040G2-F085	400	330	25.6	41	T0-252
FGD3440G2-F085	400	335	25	26.9	T0-252
FGI3040G2-F085	400	330	25.6	41	T0-252
ISL9V2040D3ST	400	200	10	1.9	T0-252
ISL9V3040D3ST	400	300	17	1.6	T0-252
FGB3040G2-F085	400	330	25.6	41	T0-263
FGB3440G2-F085	400	335	25	26.9	T0-263
ISL9V2040S3ST	400	200	10	1.45	T0-263
ISL9V2540S3ST	400	250	10	1.8	T0-263
ISL9V3040S3ST	400	300	17	1.6	T0-263
FGB3040CS	400	300	19	1.6	T0-263-6
FGD3245G2-F085	450	320	26	28	T0-252
FGB3245G2-F085	450	320	26	28	T0-263
ISL9V5045S3ST-F085	450	500	43	1.6	T0-263
FGD3050G2-F085	500	300	20	20	T0-252
FGB3056-F085	560	300	21	1	T0-263

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## IGBTs

Device	V_CES (V)	I_C (A)	V <sub>CE(sat)</sub> Max @25°C (V)	SC Time (us)	Copacked Diode	Package(s)
FGB20N60SFD-F085	600	20	2.2	—	Stealth	D2PAK
FGH20N60SFDTU-F085	600	20	2.2	—	Stealth	TO-247
FGH40N60SFDTU-F085	600	40	2.3	—	Stealth	TO-247
FGH60N60SFDTU-F085	600	60	2.3	—	Stealth	TO-247
FGH60N60UFDTU-F085	600	60	1.9	—	Stealth	TO-247
FGH40N65UFDTU-F085	650	40	1.8	—	Stealth	TO-247
FGH40N60SMD-F085	600	40	1.9	—	Hyperfast	TO-247
FGH40N60SMD-F085	600	40	1.9	—	Ultrafast	TO-247
FGH60N60SMD-F085	600	60	1.8	—	Hyperfast	TO-247
FGH75T65UPD-F085	650	75	1.69	5	Stealth	TO-247
FGB40T65SPD-F085	650	40	2	5	Stealth	D2PAK
FGH40T65SPD-F085	650	40	1.85	5	Stealth	TO-247
AFGHL40T65SPD	650V	40	1.85	5	Stealth	TO-247 Long Lead
FGY120T65SPD-F085	650	120	1.5	6	Extremefast	TP-247
FGY160T65SPD-F085	650	160	1.7	6	Extremefast	TP-247
PCGA160T65NF8	650	160	1.6	6	PCRKA16065F8	Bare Die
PCGA200T65NF8	650	200	1.53	5	PCRKA20065F8	Bare Die
PCGA300T65DF8	650	300	1.36	5	PCRKA30065F8	Bare Die
PCGA200T65NF8M1	650	200	1.53	5	PCRKA20065F8M1	Bare Die with solderable top metal
PCGA300T65DF8M1	650	300	1.36	5	PCRKA30065F8M1	Bare Die with solderable top metal

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## SCHOTTKY RECTIFIERS

Device	V <sub>RRM</sub> (V)	I <sub>O(rec)</sub> (A)	V <sub>F</sub> Max (V)	I <sub>R</sub> Max (mA)	I <sub>FSM</sub> (A)	Package(s)
NRVB0530	0.5	30	0.43	0.13	5.5	SOD-123
NRVB140SF	1	40	0.55	0.5	30	SOD-123 FL
NRVB140ESF	1	40	0.56	0.03	30	SOD-123 FL
NRVTS245ESF*	2	45	0.65	0.075	50	SOD-123 FL
NRVTS260ESF*	2	60	0.65	0.012	25	SOD-123 FL
NRVB1H100SF	1	100	0.76	0.04	50	SOD-123 FL
NRVB2H100SF	2	100	0.84	0.04	50	SOD-123 FL
NRVTSM245E*	2	45	0.65	0.075	50	POWERMITE®
NRVTSM260E*	2	60	0.65	0.012	50	POWERMITE
MBRM1H100	1	100	0.76	0.02	50	POWERMITE
NRVBM2H100	2	100	0.84	0.02	50	POWERMITE
NRVBA140	1	40	0.55	0.5	30	SMA
NRVBA160	1	60	0.51	0.2	60	SMA
NRVBA1H100	1	100	0.76	0.04	50	SMA
NRVBA2H100	2	100	0.79	0.008	130	SMA
NRVBA340	3	40	0.45	0.3	100	SMA
NRVTS44100E*	4	100	0.68	0.009	150	SMA
MBRAF1100	1	100	0.75	0.5	50	SMA Flat
NRVBAF1540	1.5	40	0.46	0.8	40	SMA Flat
MBRAF260	2	60	0.63	0.2	60	SMA Flat
MBRAF2H100	2	100	0.79	0.05	130	SMA Flat
NRVBAF360	3	60	0.63	0.03	125	SMA Flat
NRVBAF3200	3	200	0.84	1	100	SMA Flat
NRVBAF440	4	40	0.485	0.3	100	SMA Flat
NRVTSAF5100E*	5	100	0.69	0.009	50	SMA Flat
MBRAF360	3	60	0.63	0.03	125	SMA Flat
MBRAF3200	3	200	0.84	1	100	SMA Flat
MBRAF440	4	40	0.485	0.3	100	SMA Flat
SBRS8130L	1	30	0.395	1	40	SMB
SBRS8140	1	40	0.6	1	40	SMB
SBRS8190	1	90	0.75	0.5	50	SMB
SBRS81100	1	100	0.75	0.5	50	SMB
MBRS1540	1.5	40	0.46	0.8	40	SMB
NRVBS2040L	2	40	0.43	0.8	70	SMB
NRVBS240L	2	40	0.43	2	25	SMB
NRVBS260	2	60	0.63	0.2	60	SMB
NBRS2H100	2	100	0.79	0.008	130	SMB
NRVBS360B	3	60	0.74	0.15	125	SMB
NRVBS3200	3	200	0.84	1	100	SMB
NRVTSS5100E*	5	100	0.69	0.009	50	SMB
SBRS8340	3	40	0.5	2	80	SMC
NRVBS360	3	60	0.74	0.15	125	SMC
NRVBS3100	3	100	0.79	0.05	130	SMC
NRVBS3201	3	200	0.84	1	100	SMC
NRVBS4201	4	200	0.86	1	100	SMC
NRVBS540	5	40	0.5	0.3	190	SMC
SBRD8340	3	40	0.6	0.2	75	DPAK
SBRD8350	3	50	0.6	0.2	75	DPAK
SBRD8360	3	60	0.6	0.2	75	DPAK
NBRD5H100	5	100	0.71	0.0035	105	DPAK

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. \* Trench Schottky rectifiers for improved efficiency and lower operating temperatures.

## SCHOTTKY RECTIFIERS

Device	V <sub>RRM</sub> (V)	I <sub>O(rec)</sub> (A)	V <sub>F</sub> Max (V)	I <sub>R</sub> Max (mA)	I <sub>FSM</sub> (A)	Package(s)
NRVBD640CT	6	40	0.9	0.1	75	DPAK
NRVBD650CT	6	50	0.7	0.1	75	DPAK
NRVBD660CT	6	60	0.7	0.1	75	DPAK
NRVBD1035CTL	10	35	0.56	2	50	DPAK
SBRD81045	10	45	0.57	0.1	70	DPAK
NBRB8H100	8	100	0.71	0.0045	250	D2PAK
SBRB1045	10	45	0.84	0.1	150	D2PAK
NRVBB1060	10	60	0.8	0.1	150	D2PAK
SBRB1545CT	15	45	0.84	0.1	150	D2PAK
NRVBB1645	16	45	0.63	0.2	150	D2PAK
NRVBB2060CT	20	60	0.95	0.2	150	D2PAK
NRVBB20100CT	20	100	0.95	0.1	150	D2PAK
NTSB20100CT*	20	100	0.83	0.8	150	D2PAK
NTSB20U100CT*	20	100	0.79	0.8	150	D2PAK
NTSB20120CT*	20	120	1.1	0.7	120	D2PAK
SBRB20200CT	20	200	1	1	150	D2PAK
SBRB2545CT	25	45	0.82	0.2	150	D2PAK
NRVBB30H60CT	30	60	0.62	0.3	260	D2PAK
NRVB440MFS	4	40	0.63	0.8	40	SO-8 FL / DFN-5
NRVB460MFS	4	60	0.74	0.2	40	SO-8 FL / DFN-5
NRVB540MFS	5	40	0.57	0.06	40	SO-8 FL / DFN-5
NRVB560MFS	5	60	0.75	0.15	60	SO-8 FL / DFN-5
NRVB5100MFS	5	100	0.9	0.05	60	SO-8 FL / DFN-5
NRVB5H100MFS	5	100	0.73	0.1	200	SO-8 FL / DFN-5
NRVB860MFS	8	60	0.8	0.15	150	SO-8 FL / DFN-5
NRVB8H100MFS	8	100	0.9	0.3	75	SO-8 FL / DFN-5
NRVB1045MFS	10	45	0.62	0.5	150	SO-8 FL / DFN-5
NRVB10100MFS	10	100	0.95	0.1	150	SO-8 FL / DFN-5
NRVB1240MFS	12	40	0.68	0.5	150	SO-8 FL / DFN-5
NRVB2045EMFS	20	45	0.64	0.4	400	SO-8 FL / DFN-5
NRVB30H100MFS	30	100	0.9	0.1	300	SO-8 FL / DFN-5
NRVTS1045EMFS*	10	45	0.6	0.05	210	SO-8 FL / DFN-5
NRVTS1245EMFS*	12	45	0.6	0.05	210	SO-8 FL / DFN-5
NRVTS1545EMFS*	15	45	0.6	0.05	210	SO-8 FL / DFN-5
NRVTS560EMFS*	5	60	0.61	0.03	150	SO-8 FL / DFN-5
NRVTS660MFD *	6 (3x2)	60	0.63	0.055	80	SO-8 FL / DFN-5
NRVTS860EMFS*	8	60	0.62	0.045	150	SO-8 FL / DFN-5
NRVTS1260EMFS*	12	60	0.6	0.05	210	SO-8 FL / DFN-5
NRVTS10100MFS*	10	100	0.69	0.07	200	SO-8 FL / DFN-5
NRVTS10100EMFS*	10	100	0.72	0.05	200	SO-8 FL / DFN-5
NRVTS12100MFS*	12	100	0.71	0.095	200	SO-8 FL / DFN-5
NRVTS12100EMFS*	12	100	0.73	0.055	200	SO-8 FL / DFN-5
NRVTS10120MFS*	10	120	0.825	0.055	200	SO-8 FL / DFN-5
NRVTS10120EMFS*	10	120	0.82	0.03	200	SO-8 FL / DFN-5
NRVTS12120MFS*	12	120	0.83	0.075	200	SO-8 FL / DFN-5
NRVTS12120EMFS*	12	120	0.83	0.055	200	SO-8 FL / DFN-5

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. \* Trench Schottky rectifiers for improved efficiency and lower operating temperatures.



## ULTRAFAST RECTIFIERS

Device	V <sub>RRM</sub> (V)	I <sub>O(rec)</sub> (A)	V <sub>F</sub> Max (V)	I <sub>R</sub> Max (μA)	I <sub>FSM</sub> (A)	t <sub>rr</sub> Max (ns)	Package(s)
SURA8110	100	1	0.875	2.0	50	30	SMA
SURA8210	100	2	0.94	2.0	50	30	SMA
SURS8110	100	1	0.875	2.0	40	35	SMB
SURS8210	100	2	0.94	2.0	50	30	SMB
NRVHP120SF	200	1	1	0.5	30	25	SOD-123FL
NRVHP220SF	200	2	1.05	0.5	40	50	SOD-123FL
NRVHP620MFD	200	6 (3 x 2)	1	35.0	80	25	SO-8 FL, DFN-5
NRVHP8H200MFD	200	8 (4 x 2)	0.91	0.5	80	30	SO-8 FL, DFN-5
NRVHPM120	200	1	1	0.5	30	25	POWERMITE
NRVHPM220	200	2	1.05	0.5	40	50	POWERMITE
NRVUB1620CT	200	16	0.975	5.0	100	35	D2PAK
NRVUB1620CTR	200	16	1.2	5.0	100	85	D2PAK
NRVUD620CT	200	6	1.2	5.0	63	35	DPAK
SSRD8620CT	200	6	1.15	5.0	50	45	DPAK
SSRD8620CTR	200	6	1.3	1.0	45	75	DPAK
SURA8120	200	1	0.875	2.0	40	35	SMA
SURA8220	200	2	0.95	2.0	40	35	SMA
SURD8320	200	3	0.95	5.0	75	35	DPAK
SURS8120	200	1	0.875	2.0	40	35	SMB
SURS8220	200	2	0.95	2.0	40	25	SMB
SURS8320	200	3	0.875	5.0	75	35	SMC
NRVHPAF320	200	3	1	0.5	110	30	SMA Flat Lead
SURD8530	300	5	1.05	5.0	75	50	DPAK
NRVHP140SF	400	1	1.25	0.5	25	40	SOD-123FL
SURA8140	400	1	1.1	5.0	35	65	SMA
NRVUB1660CT	600	16	1.5	10.0	100	60	D2PAK
SURHD8560	600	5	2.7	10.0	50	30	DPAK
SURHS8160	600	1	2.4	20.0	15	35	SMB
SURS8160	600	1	1.25	5.0	35	75	SMB
SURS8360	600	3	1.25	10.0	75	75	SMC

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## BIPOLAR POWER TRANSISTORS

NPN	PNP	V <sub>(BR)CEO</sub> Min (V)	I <sub>C</sub> Continuous (A)	h <sub>FE</sub> Min	h <sub>FE</sub> Max	f <sub>T</sub> Min (MHz)	P <sub>D</sub> Watts	Package(s)
NJVMJB41C	NJVMJB42C	100	6	15	75	3	65	D2PAK
NJVMJB44H11	NJVMJB45H11	80	8	60	–	–	50	
NJVMJD50	–	400	1	30	150	10	15	DPAK
NJVMJD340	NJVMJD350	300	0.5	30	240	–	15	
NJVMJD47	–	250	1	30	150	10	15	
NJVMJD41C	NJVMJD42C	100	6	15	75	3	20	
NJVMJD243	NJVMJD253	100	4	40	180	40	12.5	
NJVMJD31C	NJVMJD32C	100	3	10	50	3	15	
NJVMJD44H11	NJVMJD45H11	80	8	60	–	–	20	
NJVMJD3055	NJVMJD2955	60	10	20	100	2	20	
NJVND2873	–	50	2	120	360	65	15	
–	NJVND1718	50	2	70	240	80	15	
NJVMJD148	–	45	4	85	375	3	20	
NJVMJD31	NJVMJD32	40	3	10	50	3	15	
–	NJVMJD210	25	5	45	180	3	12.5	
–	SMMJT350	300	0.75	30	240	–	2.75	SOT-223
SPZTA42	NSVPZTA92	300	0.5	40	–	50	1.5	
SBF720	–	300	0.1	50	–	60	1.5	
SBCP56*	SBCP53	80	1 / 1.5	40*	250*	–	1.5	
SPZT651	SPZT751	60	2	40	–	75	0.8	
–	SPZT2907A	60	0.6	100	300	200	1.5	
SPZT2222A	–	40	0.6	100	300	300	1.5	
SPZT3904	–	40	0.2	100	300	300	1.5	
NJV4031N	NJV4030P	40	5	200	500	100	2	
SBCP68	NSVBCP69	20	1	85	375	–	1.5	

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. Additional AEC qualified devices are available at [www.onsemi.com](http://www.onsemi.com). \*Different h<sub>FE</sub> windows available.

## LOW SATURATION VOLTAGE TRANSISTORS

	NPN	PNP	V <sub>(BR)CEO</sub> Min (V)	I <sub>c</sub> Peak Max (A)	h <sub>FE</sub> Min	h <sub>FE</sub> Max	f <sub>T</sub> Min (MHz)	V <sub>CE(sat)</sub> @ 1.0 A Max (V)	Package(s)
Single	NSV1C301E	–	100	3	120	360	120	0.09	DPAK
	–	NSV1C300E	100	3	120	360	100	0.15	
	NSV1C201MZ4	NSV1C200MZ4	100	3	120	360	100	0.1	SOT-223
	NSV60601MZ4	NSV60600MZ4	60	12	120	360	100	0.06 / 0.07	
	NSV40301MZ4	NSV40300MZ4	40	5	200 / 175	500 / 350	–	0.1 / 0.15	SC-89
	NSV20201J	–	20	2	200	500	350	0.22	
	SNSS30201MR6	–	30	3	300	900	200	0.2	TSOP-6
	–	SNSS35200MR6	35	5	100	400	100	0.2	
	–	SMBT35200M	35	5	100	400	100	0.2	
	NSVT489AM	–	30	3	300	900	200	0.2	WDFN-6
	NSV60201SMTWTBG	NSV60200SMTWTBG	60	3	120	–	–	0.35	
	–	SNSS40600CF8	40	7	220	300	100	0.075	ChipFET
	NSV40201L	NSV1C200L	100	3	120	360	–	0.09 / 0.115	SOT-23
	NSV60201L	NSV60200L	60	4	150	350 / 300	100	0.14 / 0.22	
	NSV40201L	NSV40200L	40	4	200 / 250	–	150 / 100	0.06 / 0.095	
	NSV20201L	NSV20200L	20	4	200 / 250	–	150 / 100	0.05 / 0.09	
	–	NSVMMBT589L	30	2	100	300	100	0.3	
–	NSV12100XV6	12	2	100	–	–	0.44	SOT-563	
Dual	–	NSV40300MD	40	6	220	–	100	0.095	SOIC-8
	NSV60101DMR6T1G	NSV60100DMR6T1G	60	2	150	–	–	0.25	SC-74
	NSV60101DMTWTBG	NSV60100DMTWTBG	60	2	120	–	–	0.3	WDFN-6
	NSV60201DMTWTBG	NSV60200DMTWTBG	60	3	120	–	–	0.35	
	NSV20201DMTWTBG	NSV20200DMTWTBG	20	3	220	–	–	0.25	

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. Additional AEC qualified devices are available at [www.onsemi.com](http://www.onsemi.com).

## SMALL SIGNAL BIPOLAR TRANSISTORS

NPN	PNP	V <sub>(BR)CEO</sub> Min (V)	I <sub>C</sub> Continuous (A)	h <sub>FE</sub> Min	h <sub>FE</sub> Max	f <sub>T</sub> Min (MHz)	Package(s)
NSVBSP19	–	350	0.1	40	–	70	SOT–223
–	SMMJT350	300	0.5	30	240	–	
SPZTA42	NSVPZTA92	300	0.5	40	–	50	
SBF720	–	300	0.1	50	–	60	
SBCP56*	SBCP53*	80	1.5	40	250	–	
–	SPZT2907A	60	0.6	100	300	200	
SPZT2222A	–	40	0.6	100	300	300	
SPZT3904	–	40	0.2	100	300	300	
SBCP68	NSVBCP69	20	1	85	375	–	
SMSD602-R	–	50	0.5	120	240	–	SC–59
SMMBTA42L	–	300	0.50	40	–	50	SOT–23
–	SMMBTA92L	300	0.50	25	–	50	
SMMBT5551L	SMMBT5401L	150	0.50	60	240	100	
–	NSVBSS63L	100	0.10	30	–	50	
SMMBTA06L	SMMBTA56L	80	0.50	100	–	50	
SBC846AL	–	65	0.10	110	220	100	
SBC846BL	SBC856BL	65	0.10	125	250	100	
–	SMMBT2907AL	60	0.60	50	300	200	
–	NSVMMBT5087L	50	0.05	250	800	40	
SBCW66GL	–	45	1.20	160	400	100	
SBC817*	SBC807*	45	0.50	100*	600*	100	
SBCX19L	–	45	0.50	100	600	–	
NSVMMBT6429L	–	45	0.20	500	1250	100	
SBC847BL	SBC857BL	45	0.10	200	450	100	
SBC847CL	SBC857CL	45	0.10	420	800	100	
–	SBC857AL	45	0.10	125	250	100	
SBCW72L	–	45	0.10	200	450	–	
SMMBT4401L	SMMBT4403L	40	0.60	100	300	200	
SMMBT2222AL	–	40	0.60	100	300	300	
SMMBT3904L	SMMBT3906L	40	0.20	100	300	250	
–	SBCW30L	32	0.10	215	500	–	
SBCW33L	–	32	0.10	420	800	–	
NSVMMBT589L	–	30	1.00	100	300	100	
SBC848BL	–	30	0.10	200	450	100	
NSVBC848CL	NSVBC858BL	30	0.10	220	475	100	
–	NSVBC858CL	30	0.10	420	800	100	
SMMBT5088L	–	30	0.05	300	900	50	
NSVMMBTH10L	–	25	–	60	–	650	
NSVBC818-40L	SBC808-25L	25	0.50	250	600	100	
SMMBT6521L	–	25	0.10	300	600	–	
SMMBT5089L	–	25	0.05	400	1200	50	
SMMBT2369L	–	15	0.20	40	120	–	
SMMBT2369AL	–	15	0.20	40	120	–	
NSVMSD42W	–	300	0.15	40	–	–	
SMMBTA06W	SMMBTA56W	80	0.50	100	–	50	
SBC846BW	SBC856BW	65	0.10	220	475	100	
–	NSVMMBT2907AW	60	0.60	100	–	200	
–	SBC807-25W	45	0.50	160	400	100	
–	SBC807-40W	45	0.50	250	600	100	
SBC847AW	–	45	0.10	110	220	100	
SBC847BW	–	45	0.10	200	450	100	
SBC847CW	–	45	0.10	420	800	100	
–	SBC857BW	45	0.10	220	475	100	

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. Additional AEC qualified devices are available at [www.onsemi.com](http://www.onsemi.com). \*Gain windows available.

## SMALL SIGNAL BIPOLAR TRANSISTORS

NPN	PNP	$V_{(BR)CE0}$ Min (V)	$I_C$ Continuous (A)	$h_{FE}$ Min	$h_{FE}$ Max	$f_T$ Min (MHz)	Package(s)
SMMBT2222AW	–	40	0.60	100	300	300	SC-70 (SOT-323)
NSVMMBT4401W	–	40	0.60	100	300	250	
SMMBT3904W	SMMBT3906W	40	0.20	100	300	250	
–	S2SA1774	50	0.10	120	560	–	SC-75
S2SC4617	–	50	0.10	120	560	180	
NSVBC847BT	NSVBC857BT	45	0.10	220	475	100	
NSVMBT2222AT	–	40	0.60	100	–	300	
SMMBT3904T	NSVMMBT3906T	40	0.20	100	300	180	
NSVBC846BW	NSVBC858AW	30	0.10	125	250	100	
NSVMMBT5551M3	NSVMMBT5401M3	160	0.06	60	240	100	SOT-723
NSVBC846BM3	NSVBC856BM3	65	0.10	200	450	100	
–	NSVMMBT2907AM3	60	0.60	100	300	200	
NSV2SC5658M3	NSV2SA2029M3	50	0.10	120	560	100	
NSVMMBT2222AM3	–	40	0.60	75	375	300	
SHN1B01FDW1	Dual Complementary	50	0.2	200	400	0.38	SC-74
SBC846BDW1	Dual NPN	65	0.1	200	450	100	SC-88 (SOT-363)
SBC847CDW1		45	0.1	420	800	100	
NSVT45011MW6		45	0.1	200	500	100	
SBC847BDW1		45	0.1	200	450	100	
NSVBT2222ADW1		40	0.6	100	300	300	
SMBT3904DW1		40	0.2	100	300	300	
NSVBC848CDW1	Dual PNP	30	0.1	420	800	100	
SBC856BDW1		65	0.1	220	475	100	
SBC857BDW1		45	0.1	220	475	100	
NSVT45010MW6		45	0.1	220	475	100	
SMBT3906DW1		40	0.2	100	300	250	
SBC846BPDW1		65	0.1	200	475	100	
SBC847BPDW1	Dual Complementary	45	0.1	200	475	100	
SMBT3946DW1		40	100	100	300	250	
NSVEMX1DXV6	Dual NPN	50	0.1	120	560	–	SOT-563
SBC847CDXV6		45	0.1	420	800	–	
NSVT3904DXV6		40	0.2	100	300	300	
NSVT30010MXV6	Dual PNP	30	0.1	420	800	100	
SBC847BPDXV6	Dual Complementary	45	0.1	200	475	100	

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. Additional AEC qualified devices are available at [www.onsemi.com](http://www.onsemi.com). \*Gain windows available.

## RF BJTs

Device	Maximum Ratings		$f_T$ Typ (GHz)	Package(s)
	$V_{CE}$ (V)	$I_C$ (mA)		
NSVF3007SG3	12	30	8 @ $V_{CE} = 5$ V, $I_C = 10$ mA	SOT-323
NSVF4009SG4	3.5	40	25 @ $V_{CE} = 3$ V, $I_C = 20$ mA	SOT-343
NSVF4015SG4	12	100	10 @ $V_{CE} = 5$ V, $I_C = 50$ mA	SOT-343
NSVF4017SG4	12	100	10 @ $V_{CE} = 5$ V, $I_C = 50$ mA	SOT-343R
NSVF4020SG4	8	150	16.5 @ $V_{CE} = 5$ V, $I_C = 50$ mA	SOT-343
NSVF6001SB6*	12	100	6.7 @ $V_{CE} = 5$ V, $I_C = 30$ mA	SC-74
NSVF6003SB6	12	150	7.0 @ $V_{CE} = 5$ V, $I_C = 50$ mA	SC-74
NSVF5488SK	10	70	7.0 @ $V_{CE} = 5$ V, $I_C = 20$ mA	SC-81
NSVF5490SK	10	30	8 @ $V_{CE} = 5$ V, $I_C = 10$ mA	SC-81
NSVF5501SK	10	70	5.5 @ $V_{CE} = 5$ V, $I_C = 20$ mA	SC-81

NOTE: Contact ON Semiconductor for AEC and PAPP status. \* Pending 3Q18.

## DIGITAL TRANSISTORS

	NPN Device	PNP Device	V <sub>(BR)CEO</sub> Min (V)	I <sub>C</sub> Continuous (mA)	h <sub>FE</sub> Min	R1 (Ω)	R2 (Ω)	Package(s)
SINGLE	–	NSV9435	30	3000	125	–	10	SOT-223
	SMUN2240	–	50	100	160	47	∞	SC-59
	SMUN2213	SMUN2113	50	100	80	47	47	
	–	NSVMUN2237	50	100	80	47	22	
	NSVMUN2212	–	50	100	60	22	22	
	SMUN2214	SMUN2114	50	100	80	10	47	
	SMUN2211	SMUN2111	50	100	35	10	10	
	SMUN2216	–	50	100	160	4.7	∞	
	NSVMUN2233	–	50	100	80	4.7	47	
	SMUN2232	–	50	100	15	4.7	4.7	
	SMUN2230	–	50	100	3	1	1	
	SMMUN2213L	SMMUN2113L	50	100	80	47	47	SOT-23
	SMMUN2234L	SMMUN2134L	50	100	80	22	47	
	NSVMMUN2212L	–	50	100	60	22	22	
	SMMUN2215L	–	50	100	160	10	∞	
	SMMUN2214L	SMMUN2114L	50	100	80	10	47	
	SMMUN2211L	SMMUN2111L	50	100	35	10	10	
	SMMUN2216L	SMMUN2116L	50	100	160	4.7	∞	
	SMMUN2233L	–	50	100	80	4.7	47	
	–	NSVMMUN2133L	50	100	80	4.7	47	
	NSVMMUN2217L	–	50	100	50	4.7	10	
	NSVMMUN2232L	NSVMMUN2132L	50	100	15	4.7	4.7	SC-70 (SOT-323)
	SMMUN2238L	–	50	100	160	2.2	∞	
	–	NSVMMUN2131L	50	100	8	2.2	2.2	
	NSVMMUN2230L	–	50	100	3	1	1	
	SMUN5236	SMUN5136	50	100	80	100	100	
	SMUN5213	SMUN5113	50	100	80	47	47	
	SMUN5212	SMUN5112	50	100	60	22	22	
	SMUN5211	SMUN5111	50	100	35	10	10	
	SMUN5214	SMUN5114	50	100	80	10	47	
	SMUN5215	SMUN5115	50	100	160	10	∞	
	SMUN5216	–	50	100	160	4.7	∞	
	SMUN5232	–	50	100	15	4.7	4.7	
	SMUN5233	SMUN5133	50	100	80	4.7	47	
	SMUN5235	–	50	100	80	2.2	47	
	–	SMUN5131	50	100	8	2.2	2.2	
	–	NSVDTA115EE	50	100	80	100	100	SC-75
	SDTC144EE	NSVDTA144EE	50	100	80	47	47	
	NSVDTC144WE	–	50	100	80	47	22	
	SDTC124EE	–	50	100	60	22	22	
	SDTC114YE	SDTA114YE	50	100	80	10	47	
	SDTC114EE	NSVDTA114EE	50	100	35	10	10	
NSVDTC143ZE	NSVDTA143ZE	50	100	80	4.7	47		
NSVDTC123JE	–	50	100	80	2.2	47		
NSVDTC144TM3	–	50	100	160	47	∞		
NSVDTC144EM3	–	50	100	80	47	47		
NSVDTC114YM3	NSVDTA114YM3	50	100	80	10	47	SOT-723	
–	NSVDTA114EM3	50	100	35	10	10		
NSVDTC143ZM3	NSVDTA143ZM3	50	100	80	4.7	47		
NSVDTC143EM3	NSVDTA143EM3	50	100	15	4.7	4.7		
NSVDTC123JM3	–	50	100	80	2.2	47		
NSVDTC123EM3	NSVDTA123EM3	50	100	8	2.2	2.2		
NSVDTC113EM3	NSVDTA113EM3	50	100	3	1	1		

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. Additional AEC qualified devices are available at [www.onsemi.com](http://www.onsemi.com).

## DIGITAL TRANSISTORS

	NPN Device	PNP Device	V <sub>(BR)CEO</sub> Min (V)	I <sub>C</sub> Continuous (mA)	h <sub>FE</sub> Min	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)	Package(s)
DUAL	SMUN5213DW1	SMUN5113DW1	50	100	80	47	47	SC-88
	SMUN5237DW1	NSVMUN5137DW1	50	100	80	47	22	
	NSVMUN5212DW1	SMUN5112DW1	50	100	60	22	22	
	–	SMUN5115DW1	50	100	160	10	∞	
	SMUN5214DW1	SMUN5114DW1	50	100	80	10	47	
	SMUN5211DW1	SMUN5111DW1	50	100	35	10	10	
	SMUN5216DW1	SMUN5116DW1	50	100	160	4.7	∞	
	SMUN5233DW1	–	50	100	80	4.7	47	
	SMUN5232DW1	–	50	100	15	4.7	4.7	
	SMUN5235DW1	–	50	100	80	2.2	47	
	SMUN5231DW1	SMUN5131DW1	50	100	8	2.2	2.2	
	SMUN5230DW1	–	50	100	3	1	1	
	NSVBC124EDXV6	–	50	100	60	22	22	SOT-563
NSVBC114YDXV6	NSVBA114YDXV6	50	100	80	10	47		
	Device	Type	V <sub>(BR)CEO</sub> Min (V)	I <sub>C</sub> Continuous (mA)	h <sub>FE</sub> Min	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)	Package(s)
Combinational	SMUN5311DW1	Complementary	50	100	35	10	10	SC-88
	SMUN5312DW1		50	100	80	22	22	
	SMUN5313DW1		50	100	80	47	47	
	SMUN5314DW1		50	100	80	10	47	
	SMUN5315DW1		50	100	160	10	∞	
	SMUN5330DW1		50	100	3	1	1	
	NSVMUN5332DW1		50	100	15	4.7	4.7	
	NSVMUN5333DW1		50	100	80	4.7	47	
	NSVMUN5334DW1		50	100	80	22	47	
	SMUN5335DW1		50	100	80	2.2	47	
	NSVB123JPDV6		50	100	80	2.2	47	
	NSVB124XPDV6		50	100	80	22	47	
	NSVB143TPDV6		50	100	160	4.7	∞	
	NSVB143ZPDV6		50	100	80	4.7	47	
	NSVB144EPDV6		50	100	80	47	47	
	NSVUMC2N	Digital PNP Trx Base to Collector of Digital NPN Trx	50	100	100	22	22	SC-88A
	NSVUMC3N		50	100	35	10	10	
	NSVUMC5N		50	100	20	47 / 4.7	47 / 10	
	NSVB1706DMW5	Dual NPN, Common Emitter	50	100	80	4.7	47	

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. Additional AEC qualified devices are available at [www.onsemi.com](http://www.onsemi.com).

## DARLINGTON TRANSISTORS

NPN	PNP	V <sub>(BR)CEO</sub> Min (V)	I <sub>C</sub> Continuous (A)	h <sub>FE</sub> Min	h <sub>FE</sub> Max	f <sub>T</sub> Min (MHz)	Package(s)
NJVND35N04	–	350	4	2k	–	90	DPAK
–	NJVMJD128	120	8	1k	12k	4	
NJVMJD127	–	100	8	1k	12k	4	
NJVMJD122	–	100	8	1k	12k	4	
NJVMJD112	NJVMJD117	100	2	1k	12k	25	
NJVMJD44E3	–	80	10	1k	–	–	
NJVMJD6039	–	80	2	1k	–	–	
NJBUB323Z	–	350	20	500	3400	2	D2PAK
MJB5742	–	400	16	200	–	–	
S BSP52	–	80	1	2	–	–	SOT-223
SMMBT6427L	–	40	0.5	20k	200k	130	SOT-23
–	SMMBTA64L	30	0.5	20k	–	125	
SMMBTA13L	–	30	0.3	10k	–	125	
SMMBTA14L	–	30	0.3	20k	–	125	

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. Additional AEC qualified devices are available at [www.onsemi.com](http://www.onsemi.com).

## SCHOTTKY DIODES

Device	V <sub>R</sub> (V)	I <sub>F</sub> (mA)	C <sub>T</sub> Max (pF)	V <sub>F</sub> Max (V)	I <sub>R</sub> Max (μA)	Type	Package(s)
SMMSD701	70	200	1	0.5	0.2	Single	SOD-123
SMMSD301	30	200	1.5	0.45	0.2	Single	
NSVBAT54H	30	200	10	0.32	2	Single	SOD-323
NSVR0320MW2	23	1000	35	0.27	50	Single	
NSVR1020MW2	20	1000	29	0.44	40	Single	
NSVRB751V40	30	30	2	0.37	0.5	Single	
NSVR0240H	40	250	4	0.45	0.55	Single	
NSVR0340H	40	250	6	0.35	1	Single	
MMDL770	70	70	1	0.5	0.2	Single	
NSR0340V2	40	250	6	0.35	1	Single	SOD-523
NSVR0240V2	40	250	4	0.7	0.55	Single	
NSVR0520V2	20	500	35	0.48	30	Single	
NSVRB521S30	30	200	—	0.5	30	Single	
NSVRB751S40	30	30	2.5	0.37	0.5	Single	
RB520S30	30	200	—	0.6	1	Single	
SBAT54XV2	30	200	10	0.32	2	Single	
NSVR0230M2	30	200	—	0.325	10	Single	SOD-723
NSVR0230P2	30	200	—	0.325	10	Single	SOD-923
NSR0620P2	20	500	12	0.31	10	Single	
NSR0140P2	30	70	2	0.28	0.3	Single	
NSR0130P2	30	100	-	0.38	0.35	Single	
NSR0530P2	30	500	10	0.37	10	Single	
NSVR0240P2	40	200	7	0.365	0.55	Single	
NSR0340P2	40	200	4	0.32	5	Single	
NSR0170P2	70	70	2	0.39	9	Single	SOT-723
NSR0140M2	30	70	2.5	0.35	0.5	Single	
NSVBAT54M3	30	200	10	0.32	2	Single	SOT-723
NSR0130M2	30	100	—	0.38	0.35	Single	
NSVBAS70L	70	70	2	0.41	0.1	Single	SOT-23
SMMBD701L	70	—	1	0.5	0.2	Single	
SBAS70-04L	70	—	2	0.41	0.1	Dual Series	
SBAS40L	40	120	5	0.38	1	Single	
SBAS40-04L	40	120	5	0.38	1	Dual Series	
SBAS40-06L	40	120	5	0.38	1	Dual Common Anode	
SBAT54CL	30	200	10	0.32	2	Dual Common Cathode	
NSVBAT54L	30	200	10	0.32	2	Single	
SBAT54AL	30	200	10	0.32	2	Dual Common Anode	
SBAT54SL	30	200	10	0.32	2	Dual Series	
SMMBD301L	30	—	1.5	0.45	0.2	Single	
NSVMMBD353L	7	—	1	0.6	10	Dual Series	
NSVMMBD354L	7	—	1	0.6	10	Dual Common Cathode	
SMMBD770	70	200	1	0.5	0.2	Single	
SBAT54AW	30	200	10	0.32	2	Dual Common Anode	
SBAT54CW	30	200	10	0.32	2	Dual Common Cathode	
NSVBAT54W	30	200	10	0.32	2	Single	
NSVBAT54SW	30	200	10	0.32	2	Dual Series	
SMMBD330	30	200	1.5	0.45	0.2	Single	
NSVMMBD352W	7	—	1	0.6	10	Dual Series	
NSVMBD770DW1	70	200	1	0.5	0.2	Dual Isolated	SC-88-6 (SC-70-6, SOT-363-6)
SBAT54CT	30	600	10	0.32	2	Dual Common Cathode	SC-75

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. Additional AEC qualified devices are available at [www.onsemi.com](http://www.onsemi.com).

## RF SCHOTTKY BARRIER DIODE

Device	Maximum Rating			Package(s)
	V <sub>R</sub> (V)	V <sub>F</sub> Max (mV) @ I <sub>F</sub> = 1 mA	C Typ (pF) @ V <sub>R</sub> = 0.2 V, f = 1 MHz	
NSVR201MX	2	320	0.15	X2DFN2
NSVR351SDSA3	5	230	0.69	SC-59

NOTE: Contact ON Semiconductor for AEC and PAPP status.



## SWITCHING DIODES

Device	V <sub>R</sub> Min (V)	I <sub>R</sub> Max (μA)	V <sub>F</sub> Max (V)	C <sub>T</sub> Max (pF)	t <sub>rr</sub> Max (ns)	Type	Package(s)
SM1MA151WK	40	0.1	1.2	2	2	Dual Common Cathode	SC-59
SBAS21L	250	0.1	1	5	50	Single	SOT-23
NSVBAS21SL	250	1	1	5	50	Dual Series	
SBAS20L	200	0.1	1	5	50	Single	
NSVBAS19L	120	0.1	1	5	50	Single	
SMMBD7000L	100	1	1.1	1.5	4	Dual Series	
SBAW56L	100	5	1	4	4	Single	
SMMBD914L	100	5	1	4	4	Dual Common Cathode	
SBAS116L	75	0.005	1.1	2	3000	Single	
SBAS16L	75	1	1	2	6	Single	
SBAV199L	70	0.005	1	2	3000	Dual Series	
SBAV70L	70	2.5	1	1.5	6	Dual Common Anode	
SBAV99L	70	2.4	1	1.5	6	Dual Series	
SBAW56L	70	2.4	1	2	6	Dual Common Anode	
SMMBD2837L	35	0.1	1	4	4	Dual Common Cathode	
NSVBAS20L	200	0.1	1.25	5	50	Single	
NSVBAS116L	75	0.2	1	2	6	Dual Common Cathode	
SM1MA142WA	80	0.1	1.2	2	10	Dual Common Cathode	SC-70
SM1MA142WK	80	0.1	1.2	2	10	Dual Common Anode	
SBAS16W	75	1	1	2	6	Single	
SBAV70W	70	5	1	1.5	6	Dual Common Cathode	
SBAV99RW	70	2.5	1	1.5	6	Dual Series	
SBAW56W	70	2.5	1	2	6	Dual Common Anode	
SBAV99W	70	2.4	1	1.5	6	Dual Series	
NSVBAS21TMR6	250	0.1	1.25	5	50	Tri Isolated	SC-74
SHN2D02FUTW1	80	0.1	1.2	2	3	Tri Isolated	SC-88-6
SBAS21DW5	250	0.1	1	5	50	Dual Isolated	SC-88A 5
SBAS16DXV6	75	1	1	2	6	Dual Isolated	SOT-563
NSVBAS21M3	250	0.1	1	5	50	Single	SOT-723
NSVAV70T	70	5	1	1.5	6	Dual Common Cathode	SC-75
SBAW56T	70	2.5	1	2	6	Dual Common Anode	
SMMSD103	250	1	1	5	50	Single	SOD-123
SMMSD4148	100	5	1	4	4	Single	
SMMSD914	100	5	1	4	4	Single	
NSVD350HT1G	350	1500	5	0.6	0.15	Single	SOD-323
NSVBAS21H	250	1	1	5	50	Single	
SBAS20H	200	0.1	1	5	50	Single	
SMMDL914	100	5	1	4	4	Single	
SBAS16H	75	1	1	2	6	Single	
SMMDL6050	70	0.1	0.7	2.5	4	Single	
NSV1SS400	100	0.1	1.2	3	4	Single	SOD-523
SBAS16XV2	75	1	1	2	6	Single	

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## PIN DIODES

Device	Maximum Rating		C Typ (pF) @ V <sub>R</sub> = 50 V, f = 1 MHz	r <sub>s</sub> Typ (Ω) @ I <sub>F</sub> = 10 mA, f = 100 MHz	Package(s)
	V <sub>R</sub> (V)	I <sub>F</sub> (mA)			
NSVP249SDSF3	50	50	0.23	4.5	SC-70
NSVP264SDSF3*	50	50	0.23	2.5	SC-70

NOTE: Contact ON Semiconductor for AEC and PAPP status. \* Pending 3Q18.

## ZENER DIODES

V <sub>Z</sub> Typ	225 mW		225 mW		300 mW		500 mW		500 mW			1.5 W	3 W
Volts	SOT-23 (5%)	SOT-23 (2%)	SOT-23 (5%)	SOT-23 (2%)	SOD-323 (5%)	SOD-323 (2%)	SOD-523 (5%)	SOD-523 (2%)	SOD-123			SMA	SMB
2.4	NZ9F2V4	NZ9F2V4	BZX84C2V4L	–	MM3Z2V4	–	MM5Z2V4	MM5Z2V4	–	MMSZ2V4	–	–	–
2.7	NZ9F2V7	NZ9F2V7	BZX84C2V7L	–	MM3Z2V7	–	MM5Z2V7	MM5Z2V7	–	MMSZ2V7	MMSZ5223B	–	–
3	NZ9F3V0	NZ9F3V0	BZX84C3V0L	–	MM3Z3V0	MM3Z3V0	MM5Z3V0	–	MMSZ4683	MMSZ3V0	MMSZ5225B	–	–
3.3	NZ9F3V3	NZ9F3V3	BZX84C3V3L	–	MM3Z3V3	MM3Z3V3	MM5Z3V3	MM5Z3V3	MMSZ4684	MMSZ3V3	MMSZ5226B	1SMA5913B	1SMB5913B
3.6	NZ9F3V6	NZ9F3V6	BZX84C3V6L	–	MM3Z3V6	–	MM5Z3V6	MM5Z3V6	MMSZ4685	MMSZ3V6	–	–	1SMB5914B
3.9	NZ9F3V9	NZ9F3V9	BZX84C3V9L	–	MM3Z3V9	MM3Z3V9	–	–	MMSZ4686	MMSZ3V9	–	–	1SMB5915B
4.3	NZ9F4V3	NZ9F4V3	BZX84C4V3L	–	MM3Z4V3	MM3Z4V3	MM5Z4V3	MM5Z4V3	MMSZ4687	–	–	1SMA5914B	–
4.7	NZ9F4V7	NZ9F4V7	BZX84C4V7L	BZX84B4V7L	MM3Z4V7	MM3Z4V7	MM5Z4V7	MM5Z4V7	MMSZ4688	–	MMSZ5230B	1SMA5917B	1SMB5917B
5.1	NZ9F5V1	NZ9F5V1	BZX84C5V1L	BZX84B5V1L	MM3Z5V1	MM3Z5V1	MM5Z5V1	MM5Z5V1	MMSZ4689	MMSZ5V1	MMSZ5231B	1SMA5918B	1SMB5918B
5.6	NZ9F5V6	NZ9F5V6	BZX84C5V6L	BZX84B5V6L	MM3Z5V6	MM3Z5V6	MM5Z5V6	MM5Z5V6	MMSZ4690	MMSZ5V6	MMSZ5232B	1SMA5919B	1SMB5919B
6.2	NZ9F6V2	NZ9F6V2	BZX84C6V2L	BZX84B6V2L	MM3Z6V2	MM3Z6V2	MM5Z6V2	MM5Z6V2	MMSZ4691	MMSZ6V2	MMSZ5234B	1SMA5920B	1SMB5920B
6.8	NZ9F6V8	NZ9F6V8	BZX84C6V8L	BZX84B6V8L	MM3Z6V8	MM3Z6V8	MM5Z6V8	MM5Z6V8	MMSZ4692	MMSZ6V8	MMSZ5235B	1SMA5921B	1SMB5921B
7.5	NZ9F7V5	NZ9F7V5	BZX84C7V5L	BZX84B7V5L	MM3Z7V5	MM3Z7V5	MM5Z7V5	MM5Z7V5	MMSZ4693	MMSZ7V5	MMSZ5236B	1SMA5922B	1SMB5922B
8.2	NZ9F8V2	NZ9F8V2	BZX84C8V2L	BZX84B8V2L	MM3Z8V2	MM3Z8V2	MM5Z8V2	MM5Z8V2	MMSZ4694	MMSZ8V2	MMSZ5237B	1SMA5923B	1SMB5923B
9.1	NZ9F9V1	NZ9F9V1	BZX84C9V1L	BZX84B9V1L	MM3Z9V1	MM3Z9V1	MM5Z9V1	MM5Z9V1	MMSZ4696	MMSZ9V1	–	1SMA5924B	1SMB5924B
10	NZ9F10V	NZ9F10V	BZX84C10L	–	MM3Z10V	MM3Z10V	MM5Z10V	–	MMSZ4697	MMSZ10	MMSZ5240B	1SMA5925B	1SMB5925B
11	NZ9F11V	NZ9F11V	BZX84C11L	–	MM3Z11V	–	MM5Z11V	–	MMSZ4698	MMSZ11	–	–	1SMB5926B
12	NZ9F12V	NZ9F12V	BZX84C12L	BZX84B12L	MM3Z12V	MM3Z12V	MM5Z12V	MM5Z12V	MMSZ4699	MMSZ12	MMSZ5242B	1SMA5927B	1SMB5927B
13	NZ9F13V	NZ9F13V	BZX84C13L	–	MM3Z13V	MM3Z13V	MM5Z13V	–	–	MMSZ13	MMSZ5243B	1SMA5928B	1SMB5928B
14	–	–	–	–	–	–	–	–	MMSZ4701	–	MMSZ5244B	1SMA5929B	–
15	NZ9F15V	NZ9F15V	BZX84C15L	BZX84B15L	MM3Z15V	MM3Z15V	MM5Z15V	–	MMSZ4702	MMSZ15	MMSZ5245B	–	1SMB5929B
16	NZ9F16V	NZ9F16V	BZX84C16L	BZX84B16L	MM3Z16V	MM3Z16V	MM5Z16V	MM5Z16V	MMSZ4703	MMSZ16	MMSZ5246B	1SMA5930B	1SMB5930B
17	–	–	–	–	–	–	–	–	MMSZ4704	–	MMSZ5247B	–	–
18	NZ9F18V	NZ9F18V	BZX84C18L	BZX84B18L	MM3Z18V	MM3Z18V	MM5Z18V	MM5Z18V	MMSZ4705	MMSZ18	MMSZ5248B	1SMA5931B	1SMB5931B
19	–	–	–	–	–	–	–	–	MMSZ4706	–	MMSZ5249B	–	–
20	NZ9F20V	–	BZX84C20L	–	MM3Z20V	–	MM5Z20V	–	MMSZ4707	MMSZ20	MMSZ5250B	1SMA5932B	1SMB5932B
22	NZ9F22V	–	BZX84C22L	BZX84B22L	MM3Z22V	MM3Z22V	MM5Z22V	–	–	MMSZ22	–	1SMA5933B	1SMB5933B
24	NZ9F24V	–	BZX84C24L	BZX84B24L	MM3Z24V	MM3Z24V	MM5Z24V	–	MMSZ4709	MMSZ24	MMSZ5252B	1SMA5934B	1SMB5934B
27	–	–	BZX84C27L	BZX84B27L	MM3Z27V	MM3Z27V	MM5Z27V	–	MMSZ4711	MMSZ27	MMSZ5254B	1SMA5935B	1SMB5935B
30	–	–	BZX84C30L	–	MM3Z30V	MM3Z30V	MM5Z30V	–	MMSZ4713	MMSZ30	MMSZ5256B	1SMA5936B	1SMB5936B
33	–	–	BZX84C33L	–	MM3Z33V	MM3Z33V	MM5Z33V	–	MMSZ4714	MMSZ33	MMSZ5257B	1SMA5937B	1SMB5937B
36	–	–	BZX84C36L	–	MM3Z36V	MM3Z36V	MM5Z36V	–	MMSZ4715	MMSZ36	MMSZ5258B	1SMA5938B	1SMB5938B
39	–	–	BZX84C39L	–	MM3Z39V	MM3Z39V	MM5Z39V	–	–	MMSZ39	MMSZ5259B	1SMA5939B	1SMB5939B
43	–	–	BZX84C43L	–	MM3Z43V	–	MM5Z43V	–	MMSZ4717	–	MMSZ5260B	1SMA5940B	1SMB5940B
47	–	–	BZX84C47L	–	MM3Z47V	–	MM5Z47V	–	–	–	MMSZ5261B	1SMA5941B	1SMB5941B
51	–	–	BZX84C51L	–	MM3Z51V	–	MM5Z51V	–	–	–	MMSZ5262B	1SMA5942B	1SMB5942B
56	–	–	BZX84C56L	–	MM3Z56V	–	MM5Z56V	–	–	–	–	1SMA5943B	1SMB5943B
62	–	–	BZX84C62L	–	–	–	MM5Z62V	–	–	–	MMSZ5265B	–	1SMB5944B
68	–	–	BZX84C68L	–	MM3Z68V	–	MM5Z68V	–	–	–	MMSZ5266B	1SMA5945B	1SMB5945B
75	–	–	BZX84C75L	–	MM3Z75V	–	MM5Z75V	–	–	–	MMSZ5267B	–	1SMB5946B
82	–	–	–	–	–	–	–	–	–	–	–	–	1SMB5947B
100	–	–	–	–	–	–	–	–	–	–	–	–	1SMB5949B

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## ZENER DIODE ARRAYS

	Device	V <sub>BR</sub> Typ (V)	V <sub>RWM</sub> Max (V)	I <sub>R</sub> Max (μA)	I <sub>pp</sub> Max* (A)	V <sub>C</sub> Max (V)	Package(s)	
Dual Common Cathode	MMBZ15VDL	15	12.8	0.1	1.9	21.2	SOT-23	
	MMBZ27VCL	27	22	0.05	1	38		
Dual Common Anode	MMBZ5V6AL	5.6	3	5	3	8		
	MMBZ6V2AL	6.2	3	0.5	2.76	8.7		
	MMBZ6V8AL	6.8	4.5	0.5	2.5	9.6		
	MMBZ9V1AL	9.1	6	0.3	1.7	14		
	MMBZ12VAL	12	8.5	0.2	2.35	17		
	MMBZ15VAL	15	12	0.05	1.9	21		
	MMBZ16VAL	15.20	16	16.80	1.7	23		
	MMBZ16VTAL	15.68	16	16.32	1.7	23		
	MMBZ18VAL	18	14.5	0.05	1.6	25		
	MMBZ20VAL	20	17	0.05	1.4	28		
	MMBZ27VAL	27	22	0.05	1	40		
	MMBZ33VAL	33	26	0.05	0.87	46		
	MMBZ47VAL	44.65	47	49.35	0.74	54		
	MMBZ47VTAL	46.06	47	47.94	0.74	54		
Dual Common Cathode	MMBZ27VCW	27	22	0.05	1	38		SC-70
Dual Common Anode	MMBZ27VAW	27	22	0.05	1	40		
Quad	MMQA5V6	5.6	—	—	—	—	SC-74	
	MMQA6V2	6.2	—	—	—	—		
	MMQA6V8	6.8	—	—	—	—		
	MMQA15V	15	—	—	—	—		
	MMQA20V	20	—	—	—	—		
	MMQA27V	27	—	—	—	—		
	MMQA33V	33	—	—	—	—		
	MSQA6V1	6.1	—	—	—	—	SC-88	

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. \* I<sub>pp</sub> Max rating based on 10 x 1000 μs surge waveform.

## ESD &amp; EMI FILTERS

	Device	Network	Number of Channels	L or R Typ (H, Ω)	C Typ (pF)	V <sub>(BR)</sub> Typ (V)	V <sub>RWM</sub> Max (V)	ESD IEC61000 4-2 (Contact/Air)	Filter (f3dB) MHz	Differential Mode	Applications	Package(s)
CMF Differential	EMI8131MU	CMF	2	6 Ω	—	6.8	3.3	±15kV/±15kV	—	3dB > 2.5GHz	uSD, USB3.0	XDFN-6
	EMI8132MU	CMF	4	6 Ω	—	6.8	3.3	±15kV/±15kV	—	3dB > 2.5GHz	uSD, USB3.0	XDFN-10
	EMI8133MU	CMF	6	6 Ω	—	6.8	3.3	±15kV/±15kV	—	3dB > 2.5GHz	uSD, USB3.0	XDFN-16
	EMI8141MUT	CMF	2	6 Ω	—	6.8	3.3	±15kV/±15kV	—	3dB > 5GHz	uSD, USB3.0	XDFN-6
	EMI8142MUT	CMF	4	6 Ω	—	6.8	3.3	±15kV/±15kV	—	3dB > 5GHz	uSD, USB3.0	XDFN-10
	EMI8143MUT	CMF	6	6 Ω	—	6.8	3.3	±15kV/±15kV	—	3dB > 5GHz	uSD, USB3.0	XDFN-16
	EMI2121	CMF	3	8 Ω	0.8	6.8	5	±12kV/±12kV	—	>700MHz attenuation	USB2.0	WDFN-8
Single Ended	CM1624	C-R-L-C	7	28 Ω, 1nH	20	6.8	5	±15kV/±15kV	300	—	uSD	UDFN-16
	EMI7204MU	C-L-C	4	17nH	12	6.8	5	±16kV/±16kV	280	—	LCD	UDFN-8
	EMI7206MU	C-L-C	6	17nH	12	6.8	5	±16kV/±16kV	280	—	LCD	UDFN-12
	EMI7208MU	C-L-C	8	17nH	12	6.8	5	±16kV/±16kV	280	—	LCD	UDFN-16
	EMI9404MU	C-L-C-L-C	4	35nH	1.8, 4.7, 6	7.3	5	±14kV/±16kV	343	—	800MHz-2.7GHz attenuation	UDFN-8
	EMI9406MU	C-L-C-L-C	6	35nH	1.8, 4.7, 6	7.3	5	±14kV/±16kV	343	—	800MHz-2.7GHz attenuation	UDFN-12
	EMI9408MU	C-L-C-L-C	8	35nH	1.8, 4.7, 6	7.3	5	±14kV/±16kV	343	—	800MHz-2.7GHz attenuation	UDFN-16
	NUF4401MN	C-R-C	4	200 Ω	30	7	5	±15kV/±15kV	125	—	Audio, Video, General IO	DFN-8
	NUF4402MN	C-R-C	4	100 Ω	24	7	5	±14kV/±14kV	151	—	Audio, Video, General IO	DFN-8
	NUF4403MN	C-R-C	4	100 Ω	34	7	5	±18kV/±18kV	105	—	Audio, Video, General IO	DFN-8
	NUF6401MN	C-R-C	6	100 Ω	34	7	5	±15kV/±15kV	110	—	Audio, Video, General IO	DFN-12
	NZF220DFT1G	C-R-C	2	100 Ω	22	7	5	±8kV/±8kV	220	—	Audio, Clock Lines	SC-88A
	NZF220TT1	C-R-C	1	100 Ω	22	7	5	±8kV/±8kV	220	—	Audio, Clock Lines	SC-75-3

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. NOTE: I<sub>pp</sub> Max rating based on 8/20 μs surge waveform.

## ESD PROTECTION DEVICES

	Device	V <sub>BR</sub> Min (V)	V <sub>RWM</sub> Max (V)	I <sub>R</sub> Max (μA)	I <sub>pp</sub> Max* (A)	V <sub>C</sub> Max (V)	C Max (pF)	No of Channels	Topology	ESD IEC61000 4-2 (Contact/Air)	Applications	Package(s)	
IVN	SZNUP1105	25.7	24	0.1	8	44	30	1	Bidirectional	±30 kV/±30 kV	LIN and LS CAN	SOT-23	
	SZNUP2105	26.2	24	0.1	8	44	30	2	Bidirectional	±30 kV/±30 kV	HS CAN		
	SESDONCAN1	26.2	24	0.1	3	50	10	2	Bidirectional	±23 kV/±23 kV	HS CAN, CAN-FD		
	SZNUP3105	35.6	32	0.1	10	44	30	2	Bidirectional	±30 kV/±30 kV	24V System CAN		
	SZNUP2115	26.2	24	0.1	3	50	10	2	Bidirectional	±23 kV/±23 kV	FlexRay		
	SZNUP2125	26.2	24	0.1	3	50	15	2	Bidirectional	±30 kV/±30 kV	HS CAN, CAN-FD		
	NUP2128	27.5	26.5	0.1	3	70	15	2	Bidirectional	±30 kV/±30 kV	HS-CAN, CAN-FD - 175°C TJ		SC-70 (SOT-323)
	SZESD7002	16.5	16	1	-	-	0.5	2	Unidirectional	±8 kV/±15 kV	Ethernet Short-to-Battery Compliant		SOT-723
	SZESD7205	5.2	5	1	-	-	0.55	2	Unidirectional	±25 kV/±25 kV	Ethernet		SC-88 (SOT-363)
	SZESD1L001	16.5	16	1	-	-	0.50	4	Unidirectional	±8 kV/±15 kV	Ethernet Short-to-Battery Compliant		SOD-323
SZNUP1128	27.5	26.5	0.1	3	70	15	1	Bidirectional	±30 kV/±30 kV	LIN/SW CAN - 175°C TJ			
High Speed Data Line Protection	SNUP2114	5.5	5	1	12	12	1	2	Unidirectional	±8 kV/±15 kV	Gigabit Ethernet, HDMI, USB2.0	TSOP-6	
	SZNUP4114	5.5	5	1	12	12.1	0.60	4	Unidirectional	±8 kV/±15 kV	LVDS, USB2.0, Gigabit Ethernet		
	SZNUP1301	70	-	2.5	-	-	0.90	1	Bidirectional	±8 kV/±15 kV	GHz speed I/Os		
	SZESD7272	27	24	1	1	30	2	2	Unidirectional	±8 kV/±15 kV	MHz Speed I/O's Varistor Replacement	SOT-23	
	SZNUP2301	70	-	2.5	2	-	3	2	Bidirectional	±8 kV/±15 kV	MHz speed I/Os - I2C, USB2.0	SC-88	
	SZNUP4301	70	-	2.5	2	-	3	4	Bidirectional	±8 kV/±15 kV	MHz speed I/Os - I2C, USB2.0	SC-74	
	SZNUP4304	70	-	2.5	2	-	1.50	4	Bidirectional	±8 kV/±15 kV	MHz speed I/Os - I2C, USB2.0	TSOP-6	
	SZNUP4016	5.5	5	1	-	-	0.80	4	Unidirectional	±15 kV/±15 kV	USB2.0, Gigabit Ethernet	SOT-953	
	SZSD12T1G	13.3	12	1	15	25	150	1	Unidirectional	±8 kV/±15 kV	Surge, Transients	SOD-323	
	SZESD5Z5.0	6.2	5	0.05	9.4	18.6	80	1	Unidirectional	±30 kV/±30 kV	MHz speed I/Os	SOD-523	
	SZESD5Z7.0	7.5	7	0.01	8.8	22.7	65	1	Unidirectional	±30 kV/±30 kV	MHz speed I/Os		
	SZESD7002	16.5	5	1	-	-	0.50	2	Unidirectional	±8 kV/±15 kV	HDMI, USB3.0, LVDS	SC-70	
	SZESD7004	5.5	5	1	1	10	0.50	4	Unidirectional	±15 kV/±15 kV	HDMI, USB3.0, LVDS	UDFN-10	
	NIV1161	16.5	16	1	-	-	0.50	2	Unidirectional	±8 kV/±15 kV	USB 2.0/3.0, LVDS, HDMI Short to Battery Blocking	WDFN6	
	NIV2161	16.5	16	1	-	-	0.50	2	Unidirectional	±8 kV/±15 kV	USB 2.0/3.0, LVDS, HDMI Short to GND/Battery Blocking	WDFN10	
	SZESD7C5.0	11	5	0.5	-	-	6.2	2	Unidirectional	±8 kV/±15 kV	MHz speed I/Os	SOT-723	
	SZESD7205	5.2	5	1	-	-	0.55	2	Unidirectional	±25 kV/±25 kV	USB 2.0, HDMI, APIX, Ethernet		
	SZESD7371H	7	5.3	0.05	3	20	0.55	1	Unidirectional	±20 kV/±20kV	GHz speed I/Os, Antennas	SOD323	
	SZESD7351H	5	3.3	0.05	3	10	0.55	1	Unidirectional	±20 kV/±20 kV	GHz speed I/Os, Antennas		
	SZESD8351H	5.5	3.3	1	3	6	0.55	1	Unidirectional	±15 kV/±15 kV	GHz speed I/Os, Antennas		
	SZESD7361H	16.5	16	1	-	-	0.55	1	Unidirectional	±8 kV/±15 kV	GHz speed I/Os, Antennas		
	SZESD7351XV2	5	3.3	0.05	3	10	0.55	1	Unidirectional	±20 kV/±20 kV	GHz speed I/Os, Antennas	SOD523	
	SZESD8351XV2	5.5	3.3	1	3	6	0.55	1	Unidirectional	±15 kV/±15kV	GHz speed I/Os, Antennas		
	SZESD7361XV2	16.5	16	1	-	-	0.55	1	Unidirectional	±8 kV/±15kV	GHz speed I/Os, Antennas	SOD882	
	SZESD7424	26	24	1	-	-	1	1	Bidirectional	±30 kV/±30kV	GHz speed I/Os, Antennas		
	SZESD7410	10	8	1	-	-	1	1	Bidirectional	±30 kV/±30kV	GHz speed I/Os, Antennas		
	SZESD7551N2	6	3.3	0.05	3	12	0.40	1	Bidirectional	±20 kV/±20kV	GHz speed I/Os, Antennas		
	SZESD7421N2	16.5	16	0.5	1	-	0.60	1	Bidirectional	±12 kV/±15 kV	GHz speed I/Os, Antennas		
	SZESD7571N2	7	5.3	0.05	3	20	0.30	1	Bidirectional	±20 kV/±20kV	GHz speed I/Os, Antennas		
	SZESD8551N2	5.5	3.3	1	3	9	0.30	1	Bidirectional	±15 kV/±15 kV	GHz speed I/Os, Antennas		
	SZESD7462N2	16.5	16	0.1	1	30	0.55	1	Bidirectional	±18 kV/±18 kV	GHz speed I/Os, Antennas		
	SZESD7351	5	3.3	0.05	3	10	0.55	1	Unidirectional	±20 kV/±20 kV	GHz speed I/Os, Antennas		
SZESD7361P2	16.5	16	1	-	-	0.55	1	Unidirectional	±8 kV/±15 kV	GHz speed I/Os, Antennas			
SZESD7371P2	7	5.3	0.05	3	20	0.55	1	Unidirectional	±20 kV/±20 kV	GHz speed I/Os, Antennas	SOD-923		
SZESD8351P2	5.5	3.3	1	3	6	0.55	1	Unidirectional	±15 kV/±15 kV	GHz speed I/Os, Antennas			
SZESD9L3.3	4.8	3.3	1	1	9	0.90	1	Bidirectional	±10 kV/±15 kV	GHz speed I/Os			
SZESD9L5.0S	5.4	5	1	1	9.8	0.90	1	Bidirectional	±10 kV/±15 kV	RF Antenna, GHz speed I/Os			
SZESD9B5.0	5.8	5	1	1	12.5	15	1	Bidirectional	±18 kV/±18 kV	MHz speed I/Os			
SZESD9X5.0S	6.2	5	1	8.7	12.3	65	1	Unidirectional	±30 kV/±30 kV	MHz speed I/Os			

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details. \* I<sub>pp</sub> Max rating based on 10 x 1000 μs surge waveform.

## M-LVDS DRIVERS & RECEIVERS

Device	V <sub>CC</sub> Typ (V)	Operating Temperature (°C)	Signaling Rate (Mbps)	Input/Output Type	Driver Propagation Delay Max (ns)	Driver Rise/Fall Time Max (ns)	Driver RMS Period Jitter Max (ps)	Receiver Type	Receiver Propagation Delay Max (ns)	Receiver Rise/Fall Time Max (ns)	Receiver RMS Period Jitter Max (ps)
NBA3N200S	3.3	-40 to 125	200	LVCMS/MLVDS	2.4	1.6	3.5	Type 1	6	2.3	8
NBA3N201S	3.3	-40 to 125	200	LVCMS/MLVDS	2.4	1.6	3.5	Type 1	6	2.3	8
NBA3N206S	3.3	-40 to 125	200	LVCMS/MLVDS	2.4	1.6	3.5	Type 2	6	2.3	8
NBA3N011S	3.3	-40 to 125	400	LVCMS/MLVDS	1.5	1.0	N/A	N/A	N/A	N/A	N/A
NBA3N012C	3.3	-40 to 125	400	LVDS/LVCMOS	3.5	0.8	N/A	N/A	N/A	N/A	N/A

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## TOUCH SENSORS

Device	Sensing Method	Number of Sensing Inputs	Number of Sensing Outputs	Interface Control	Touch Sensing	Proximity Sensing	V <sub>DD</sub> Min (V)	V <sub>DD</sub> Max (V)	I <sub>DD</sub> Typ (µA)	Operating Temp (°C)	Package(s)
LC717A30UJ	Mutual capacitance sensing method	8	0	I2C, SPI	Yes	Yes	2.6	5.5	800	-40 to +105	SSOP-30

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## CMOS IMAGE SENSORS

Device	Sensor/SOC	Resolution (MP)	Optical Format	Frame Rate	Pixel Size (µm)	Shutter Type	CFA	Operating Temp (°C)
AR0140AT	Sensor	1	1/4"	60 fps	3	Electronic Rolling Shutter	Color	-40 to +105
AR0132AT	Sensor	1.2	1/3"	1.2 45 fps, 720p 60 fps	3.8	Electronic Rolling Shutter	Color, Mono, RCCC	-40 to +105
AR0135AT	Sensor	1.2	1/3"	60 fps @ 720p, 54 fps @ full res	3.8	Global Shutter	Mono	-40 to +105
AR0138AT	Sensor	1.2	1/2.6"	69 fps @ 720p	4.2	Electronic Rolling Shutter	RGB, RCCC	-40 to +105
AR0143AT	Sensor	1.3	1/4"	30 fps	3.0	Electronic Rolling Shutter	RGB, RCCB	-40 to +105
AR0220AT	Sensor	1.7	1/1.8"	60 fps	4.2	Electronic Rolling Shutter	RGB, RCCC, RCCB	-40 to +105
AR0230AT	Sensor	2	1/3"	30 @ fps 1080p	3.0	Electronic Rolling Shutter	Mono, RGB	-40 to +105
AR0231AT	Sensor	2.3	1/2.7"	60 fps full res @ 2 exp, 40 fps full res @ 3 exp	3.0	Electronic Rolling Shutter	RGB	-40 to +125
AR0233AT	Sensor	2.6	1/2.5"	60 fps	3.0	Electronic Rolling Shutter	RGB, RCCB	-40 to +105
AR0234AT	Sensor	2.3	1/2.6"	120 fps	3.0	Global Shutter	Mono, RGB	-40 to +85
AR0237AT	Sensor	2.1	1/2.7"	60 fps	3.0	Electronic Rolling Shutter	RGB	-40 to +105
AR0820AT	Sensor	8.3	1/2"	40 fps	2.1	Electronic Rolling Shutter	RGB, RCCC, RCCB	-40 to +105
ARX550AT	Sensor	VGA	1/5"	66.37 fps @ full res	3.8	Electronic Rolling Shutter	RGB	-40 to +105
MT9V024	Sensor	WVGA	1/3"	60 fps	6.0	Global Shutter	Color, Mono, RCCC	-40 to +105
AS0140AT	SOC	1	1/4"	60 fps	3.0	Electronic Rolling Shutter	RGB	-40 to +105
ASX340AT	SOC	VGA	1/4"	60 fps digital, 30 fps analog	5.6	Electronic Rolling Shutter	Color	-40 to +105
ASX342AT	SOC	VGA	1/4"	50/60 fps	5.6	Electronic Rolling Shutter	RGB	-40 to +105
ASX344AT	SOC	VGA	1/4"	60 fps NTSC, 50 fps PAL interlaced, 60 fps progressive	5.6	Electronic Rolling Shutter	RGB	-40 to +105
ASX350AT	SOC	VGA	1/5"	60 fps digital, 30 fps analog	3.8	Electronic Rolling Shutter	Color	-40 to +105

NOTE: All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

## IMAGE CO-PROCESSORS

Device	Maximum Resolution	Supported Sensors	Frame Rate	HDR with ALTm	Dewarp	Spatial Transform Engine Software Add-on	Overlays	GPIOs	Sensor Interfaces	Output Interfaces	Input Clock (MHz)	Output Clock	Operating Temp (°C)	Package
AP0100	1.2 MP	ARO132AT, ARO140AT, ARX550AT	1.2 MP 45 fps 720p60	YES	YES, Up to 165°	YES, Multiple viewing options, PTZ	YES	Up to 5	2-lane HiSPi, 12-bit parallel	NTSC/PAL, 16-bit parallel	6-30	27 MHz (NTSC/PAL) 84 MHz parallel	-30 to +70 (CS Version) -40 to +105 (AT Version)	VFBGA-100
AP0101	1.2 MP	ARO132AT, ARO140AT, ARX550AT	1.2 MP 45 fps	YES	NO	NO	NO	Up to 5	12-bit parallel	16-bit parallel	6-30	84 MHz parallel	-30 to +70 (CS Version) -40 to +105 (AT Version)	VFBGA-81
AP0102AT	2.0 MP	ARO132AT, ARO140AT, ARO136AT	30 fps @ 1080p, 45 fps @ 1.2Mp, 60 fps @ 720p	YES	NO	YES	YES	Up to 7	Parallel and HiSPi	Up to 24-bit parallel	6-30 MHz	125 MHz	-40°C to +105°C	VFBGA-100
AP0200AT	2.0 MP	ARO132AT, ARO136AT, ARO140AT, ARO230AT	30 fps @ 1080p, 45 fps @ 1.2Mp, 60 fps @ 720p	YES	NO	YES	YES	Up to 7	12-bit Parallel and HiSPi	Ethernet-MII, RMII, GMII	10-29 MHz	125 MHz	-40°C to +105°C	VFBGA-100
AP0201AT	2.0 MP	ARO132AT, ARO136AT, ARO140AT, ARO230AT	30 fps @ 1080p, 45 fps @ 1.2Mp, 60 fps @ 720p	YES	NO	NO	NO	Up to 7	12-bit Parallel and HiSPi	Ethernet-MII, RMII, GMII	10-29 MHz	125 MHz	-40°C to +105°C	VFBGA-100
AP0202AT	2.0 MP	ARO132AT, ARO136AT	30 fps @ 1080p, 45 fps @ 1.2Mp, 60 fps @ 720p	YES	NO	NO		Up to 7	12-bit Parallel and HiSPi	Up to 24-bit Parallel	10-29 MHz	125 MHz	-40°C to +105°C	VFBGA-100

**NOTE:** All devices in this table are AEC-Qualified and PPAP-Capable. Contact ON Semiconductor for details.

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