

Product Features

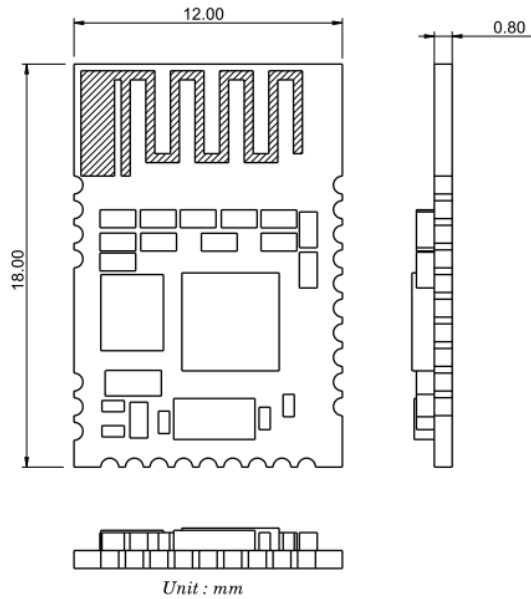
- CSR 1012 Single Chip solution:
 - Bluetooth Specification 4.1 compliant
 - 128KB memory: 64KB RAM and 64KB ROM
- RF Features:
 - Transmitter Power: ≥ 0 dBm
 - Receiver sensitivity: -85 dBm Typ
- External EEPROM memory provides storage for the Bluetooth software parameter and application parameter
- Electrical:
 - DC Supply: 1.8V ~3.6V
 - Low current consumption: 16 mA @3V (Peak Current)
- Small size: 18mm × 12mm ×2.3mm (L x W x H)



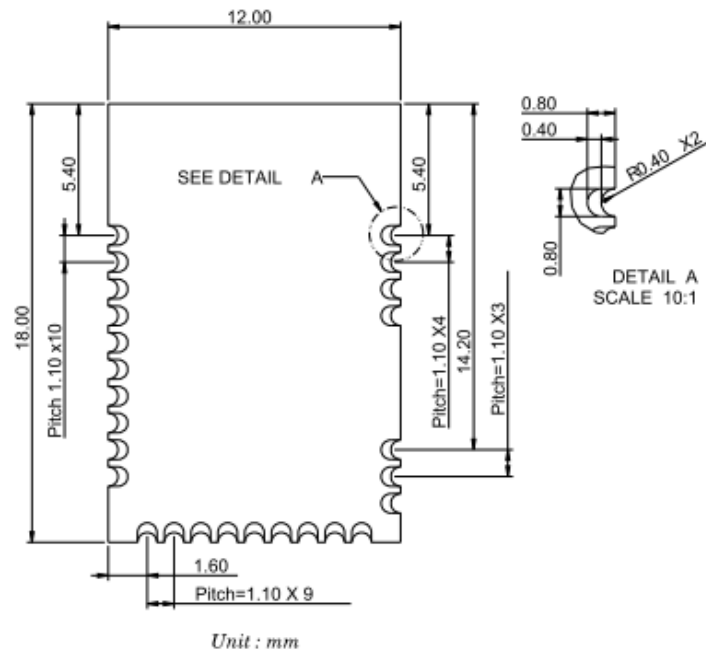
2.6 Mechanical Requirements

Item	Feature	Detailed Description
2.6.1	PCB	<ul style="list-style-type: none"> 12 mm * 18 mm * 0.8mm
2.6.2	Weight	<ul style="list-style-type: none"> N/A

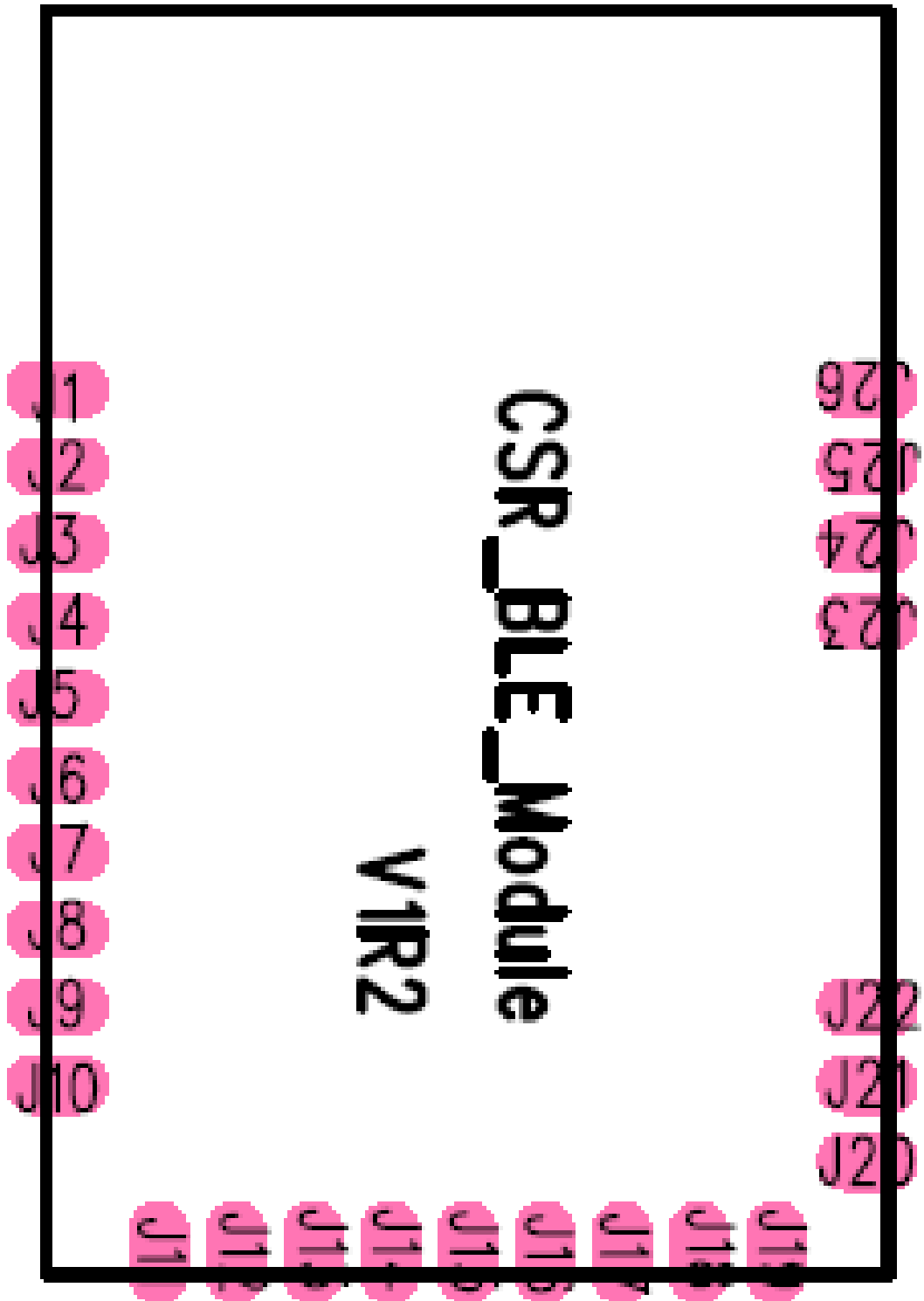
Top View:



Bottom View:



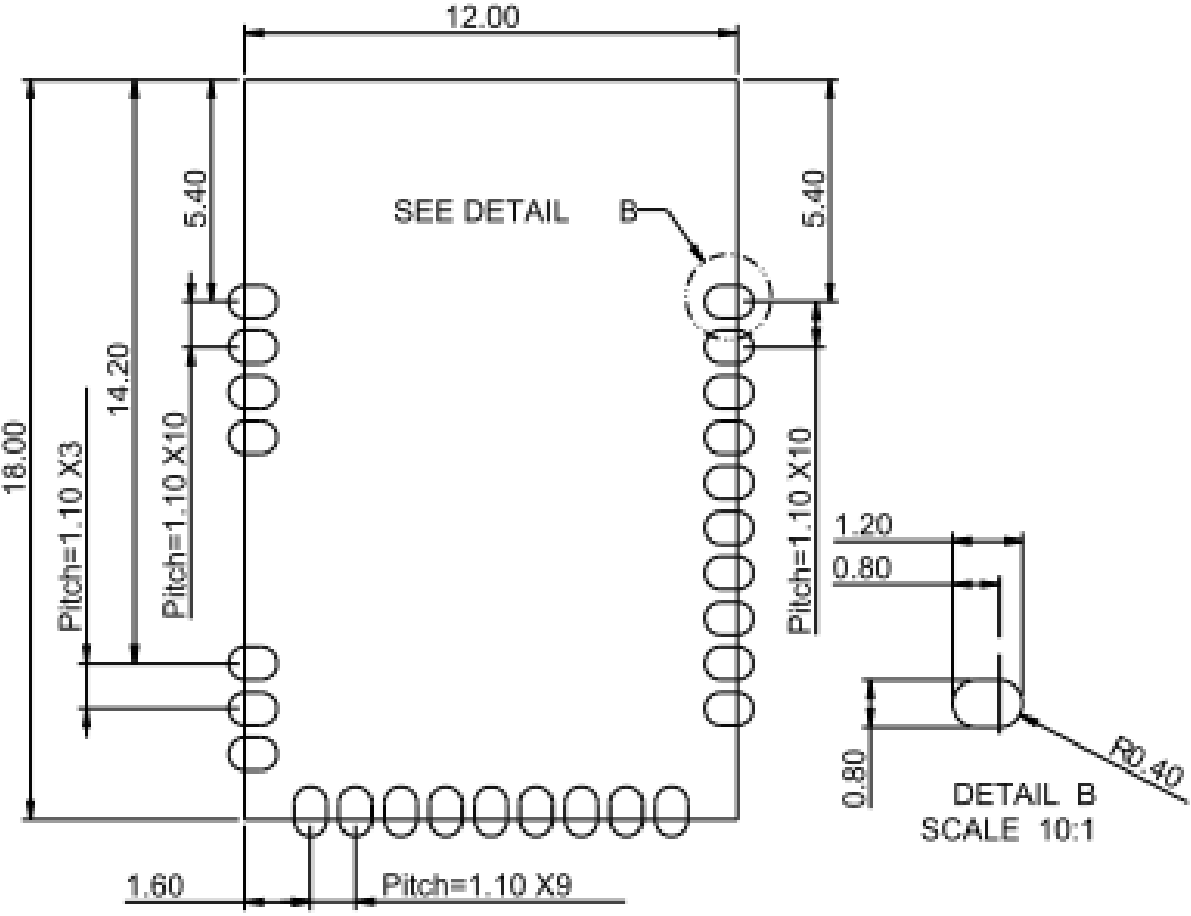
2.7 Pin Assignment:



Pin Assignment Description:

Pins	Name	Function	Description
J1	WAKE	I	Input to wake CSR1012 from hibernate or dormant. Default is pull-down.
J2	XTAL_32K_IN	Analog in	32.768KHz installed, Disconnect all to this Pin.
J3	XTAL_32K_OUT	Analog In	32.768KHz installed, Disconnect all to this Pin.
J4	I2C_SCL	I/O	SPI serial flash installed, or I2C clock Input / output.
J5	VBATT	Power	Power input.
J6	I2C_SDA	I/O	SPI serial flash installed, or I2C data Input / output.
J7	SPI_PION	I	Selects SPI debug or Programmable I/O, Pull-High : SPI debug Pull-down: Programmable I/O line, default is.
J8	PIO[11]	I/O	Programmable I/O
J9	PIO[10]	I/O	Programmable I/O
J10	PIO[9]	I/O	Programmable I/O
J11	SPI_MISO	O	SPI data output or Programmable I/O
J12	SPI_MOSI	I	SPI data input or Programmable I/O
J13	SPI_CSB	I	SPI select or Programmable I/O
J14	SPI_CLK	I/O	SPI clock or Programmable I/O
J15	PIO[4]	I/O	Programmable I/O
J16	VDD_PADS	Power	Positive supply for all digital I/O ports
J17	PIO[3]	I/O	Programmable I/O
J18	UART0_RX	I	UART RX or Programmable I/O
J19	UART0_TX	O	UART TX or Programmable I/O
J20	AIO[0]	I/O	Analogue Programmable I/O
J21	AIO[1]	I/O	Analogue Programmable I/O
J22	AIO[2]	I/O	Analogue Programmable I/O
J23	GND	Ground	Ground
J24	GND	Ground	Ground
J25	GND	Ground	Ground
J26	GND	Ground	Ground

Recommended of PCB Layout Pads



Unit : mm

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- . Reorient or relocate the receiving antenna.
- . Increase the separation between the equipment and receiver.
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- . Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

End Product Labeling

This transmitter module is authorized only for use in devices where the antenna may be installed such that 0.5 cm may be maintained between the antenna and users. The final end product must be labeled in visible area with the following: "Contains FCC ID: HQXSY-SHE-M-001"

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End Product Manual Information

The user manual for end users must include the following information in a prominent location "IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 0.5 cm from all persons and must not be colocated or operating in conjunction with any other antenna or transmitter." This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1) This device may not cause harmful interference and (2) This device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or colocation with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for reevaluating the end product (including the transmitter) and obtaining a separate FCC authorization. This device is intended only for OEM integrators under the following conditions: The antenna must be installed such that 0.5 cm is maintained between the antenna and users. As long as a condition above is met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).