INSTRUCTION MANUAL OF UGZZ5-X02

1. BLUETOOTH MODULE SPECIFICATION

1-1. PRODUCT NAME
UGZZ5-X02

1-2. MANUFACTURE
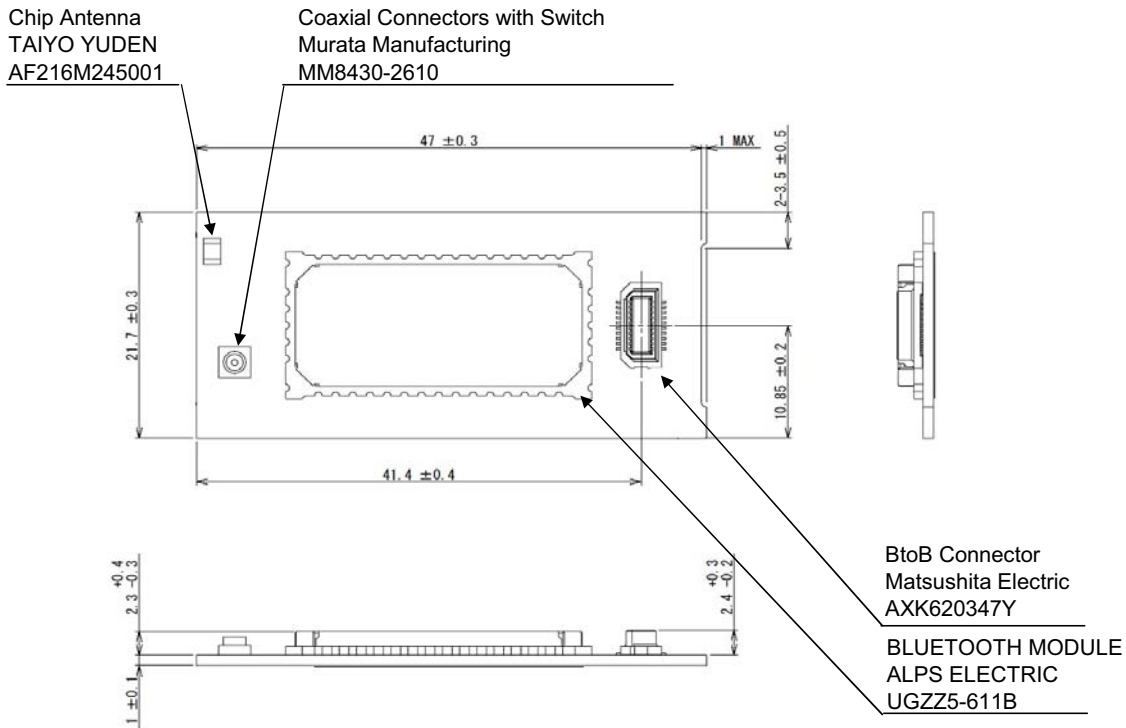ALPS ELECTRIC

1-3. FEATURES
Bluetooth™ Specification V1.2 support
Complete type of Bluetooth module, built-in various profile
Built-in Link controller, Link Manager Protocol
Output Power class2 compliant
Type with a chip antenna
Full custom package with pwb can be fit to only navigation products made by Xanavi
Built-in Flash memory(8Mbit), system clock 26MHz(OSC)
B to B interface

1-4. SPECIFICATION

1-4-1. MECHANICAL SPECIFICATION

1-4-1-1. EXTERNAL DIMENSIONS
Refer to the following page.

Chip Antenna
TAIYO YUDEN
AF216M245001

Coaxial Connectors with Switch
Murata Manufacturing
MM8430-2610

BtoB Connector
Matsushita Electric
AXK620347Y

BLUETOOTH MODULE
ALPS ELECTRIC
UGZZ5-611B

1-4-1-2. MASS
4.4 [g]

1-4-2. ELECTRIC SPECIFICATION

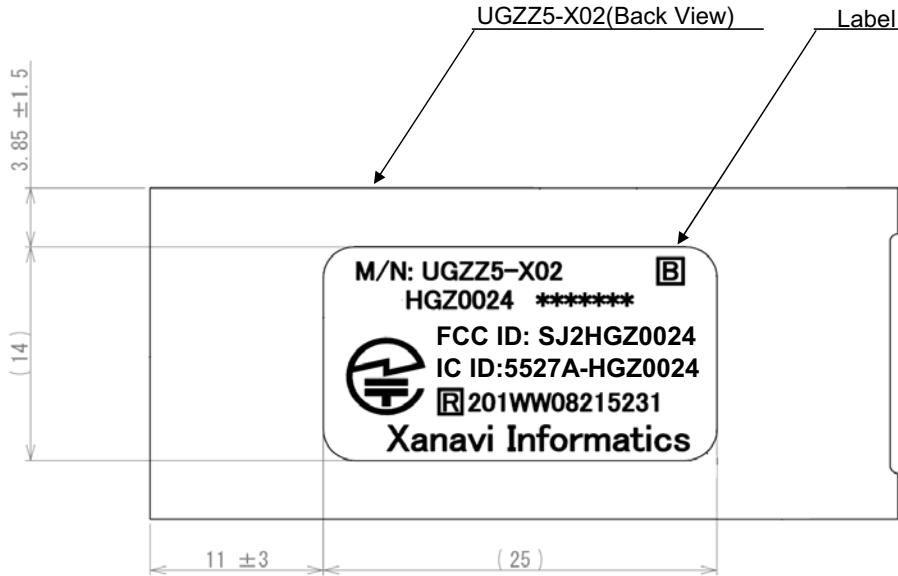##### 1-4-2-1. POWER-SUPPLY-VOLTAGE
DC +3.1 to +3.5 [V]

1-4-2-2. TEMPERATURE RANGE
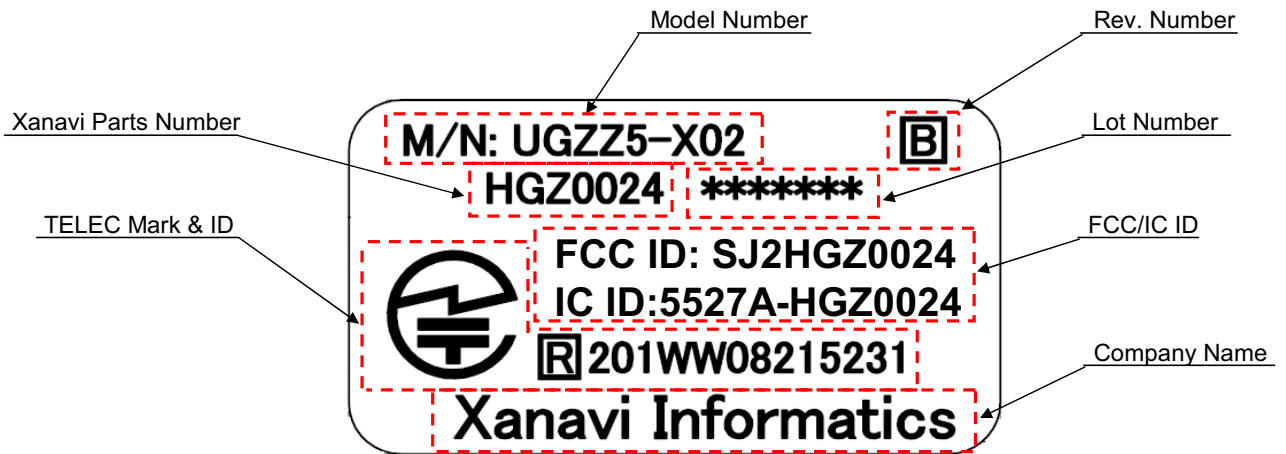-30 to +85 [degree C]

1-4-3. RF SPECIFICATION

1-4-3-1. NORMAL TRANSMIT POWER(AVERAGED POWER)
-6 to +4 [dBm]

1-4-3-2. REFERENCE SENSITIVITY LEVEL(BER=0.001%)
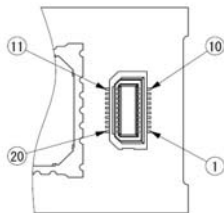MAX. -70 [dBm]
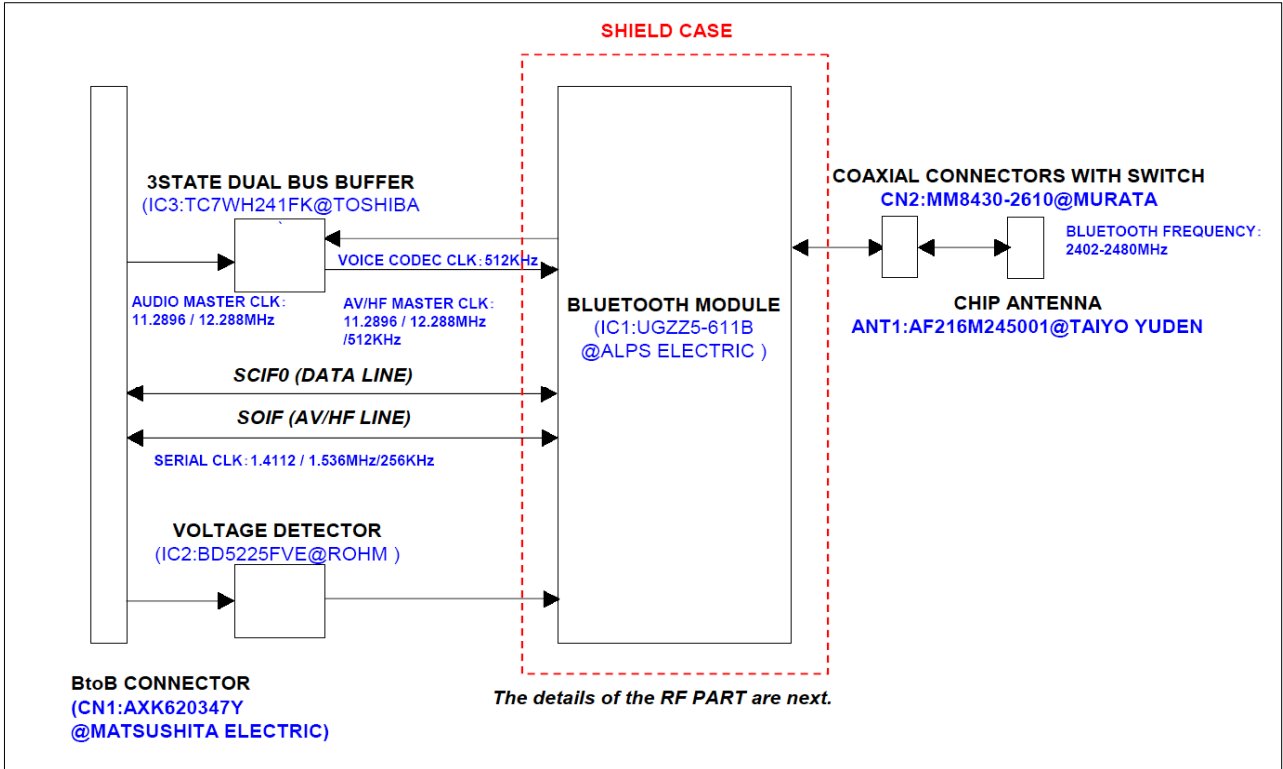
1-5. LABEL INFORMATION
1-5-1. LABEL LAYOUT

UGZZ5-X02(Back View)   Label

```
M/N: UGZZ5-X02          B
HGZ0024  *******
     FCC ID: SJ2HGZ0024
     IC ID:5527A-HGZ0024
     R 201WW08215231
  Xanavi Informatics
```

3.85 ±1.5
(14)
11 ±3   (25)

1-5-2. CONTENTS OF LABEL

Model Number   Rev. Number

Xanavi Parts Number   Lot Number

```
M/N: UGZZ5-X02          B
HGZ0024  *******
     FCC ID: SJ2HGZ0024
     IC ID:5527A-HGZ0024
     R 201WW08215231
  Xanavi Informatics
```

TELEC Mark & ID   FCC/IC ID   Company Name

1-6. CONNECTOR PIN ASSIGNMENT

BtoB Connector terminal NO.

NO.	PIN NAME	NO.	DESCRIPTION
1	VCC	I	Power Supply 3.3V
2	GND	-	Ground
3	PTB1	O	AV Master Clock Select(44.1kHz=Low, 48kHz=High)
4	PTE0	O	PCM_Reset(Active Low)
5	PTA5	O	HF/AV Status signal
6	SIOF_SYNC	O	Audio Frame signal
7	SIOF_TXD	O	AV/HF Output
8	GND	-	Ground
9	SCIF0_RTS	O	UART_RTS
10	SCIF0_CTS	I	UART_CTS
11	SCIF0_RXD	I	UART_RX
12	SCIF0_TXD	O	UART_TX
13	SIOF_SCK	O	Audio Clock
14	SIOF_RXD	I	AV/HF Input
15	CLK11/12M	I	AV Master clock Input
16	PTA6	I	MODE Select
17	BOOT_E	I	BOOT Enable
18	PTE5	O	PCM_Mute
19	RESETP/	I	Reset(Active Low)
20	VCC	I	Power Supply 3.3V

1-7. BLOCK DIAGRAM

SHIELD CASE

3STATE DUAL BUS BUFFER
(IC3:TC7WH241FK@TOSHIBA

VOICE CODEC CLK:512KHz

AUDIO MASTER CLK:
11.2896 / 12.288MHz

AV/HF MASTER CLK:
11.2896 / 12.288MHz
/512KHz

SCIF0 (DATA LINE)

SOIF (AV/HF LINE)

SERIAL CLK:1.4112 / 1.536MHz/256KHz

VOLTAGE DETECTOR
(IC2:BD5225FVE@ROHM)

BLUETOOTH MODULE
(IC1:UGZZ5-611B
@ALPS ELECTRIC)

COAXIAL CONNECTORS WITH SWITCH
CN2:MM8430-2610@MURATA

BLUETOOTH FREQUENCY:
2402-2480MHz

CHIP ANTENNA
ANT1:AF216M245001@TAIYO YUDEN

BtoB CONNECTOR
(CN1:AXK620347Y
@MATSUSHITA ELECTRIC)

The details of the RF PART are next.

2. PROCEDURE TO BUILD IN

2-1. PROCEDURE FOR UGZZ5-XO2

(1)Install UGZZ5-X02 to BT-CAP

BT-CAP
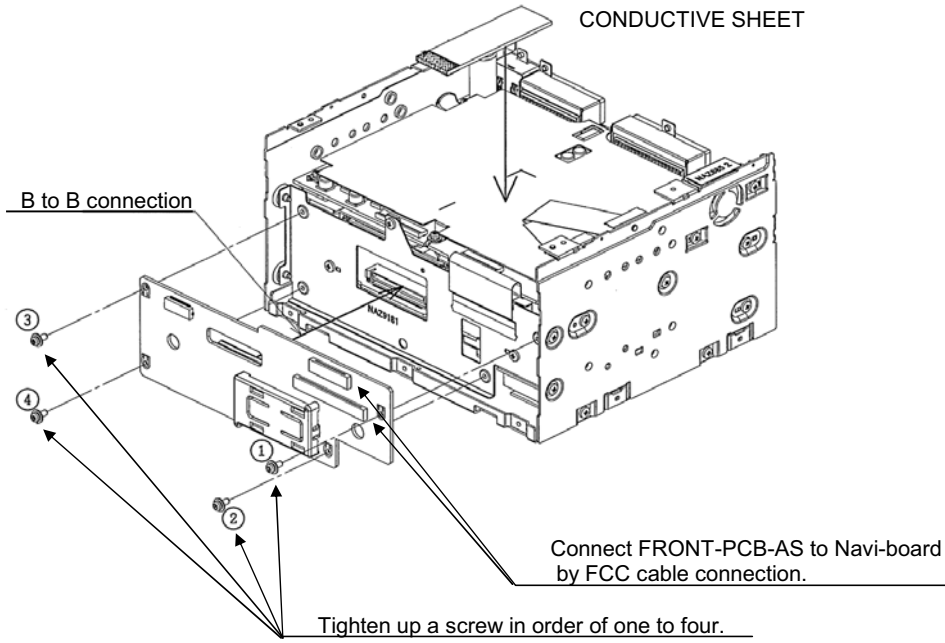
UGZZ5-X02

SLIDE

After install UGZZ5-X02 to BT-CAP
(BT-MODULE-AS)
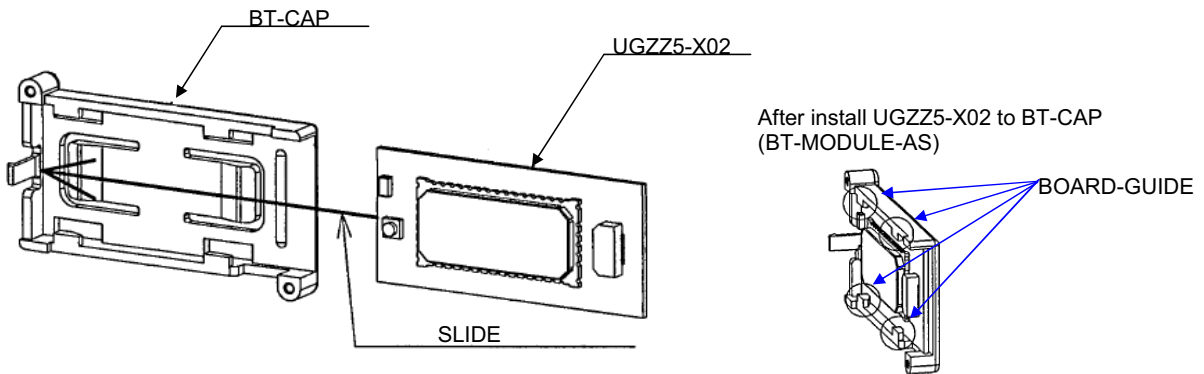
BOARD-GUIDE

Slide to 4 points of Board-guide, and sandwich the module.

(2)Connect BT-MODULE-AS to FRONT PCB by BtoB connection

Tighten up a screw in order of one to two.

FRONT PCB

① ②

B to B connection

After Connect BT-MODULE-AS to FRONT PCB
by BtoB connection (FRONT-PCB-AS)
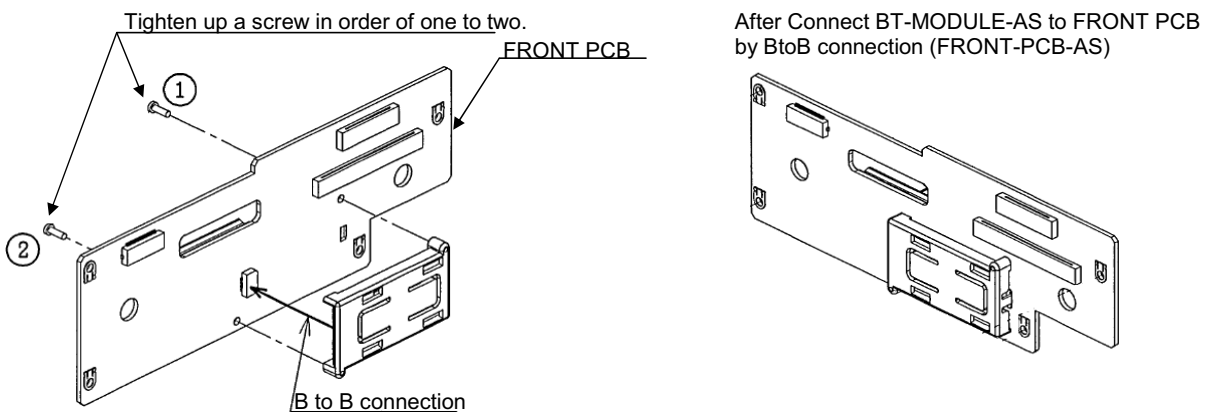
(3)Install FRONT-PCB-AS to Navigation-unit

CONDUCTIVE SHEET

B to B connection

③

④

①

②

Connect FRONT-PCB-AS to Navi-board
by FCC cable connection.

Tighten up a screw in order of one to four.

(4)Install DVD-AS to Navigation-unit
(5)Install UPPER-COVER to Navigation-unit
(6)Install FRONT-COVER to Navigation-unit
(7)Install REAR-COVER to Navigation-unit

UGZZ5-X02 installation position

Chip Antenna position
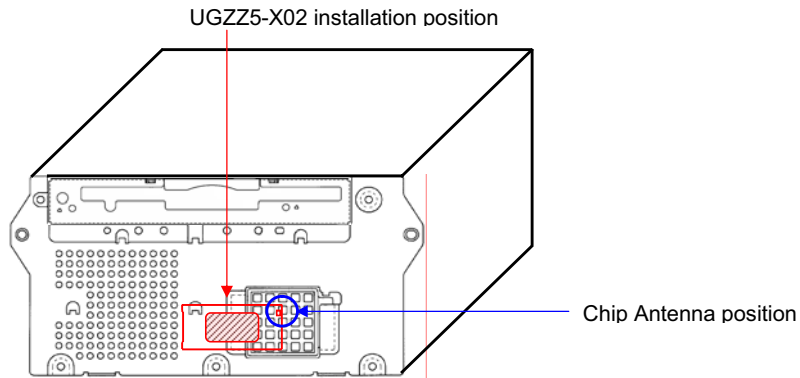
3. NOITCE

-Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

-Any changes or modifications not expressly approved by the party responsible for compliance could void
 the user's authority to operate the equipment.

-Please note that this users manual should not be provided to end-users.

-The following sentence has to be displayed on the outside of the device in which the module is installed:
 "Contains Transmitter Module FCC ID: SJ2HGZ0024", or "Contains FCC ID: SJ2HGZ0024"

-This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.