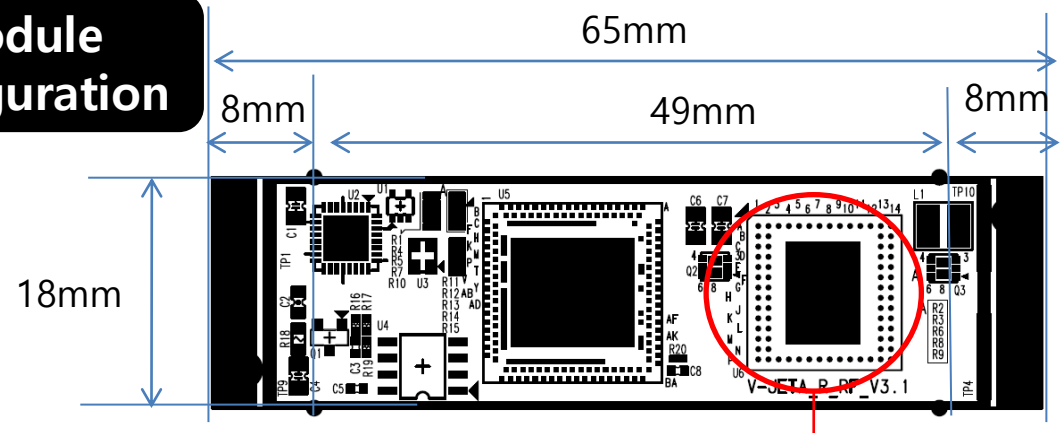
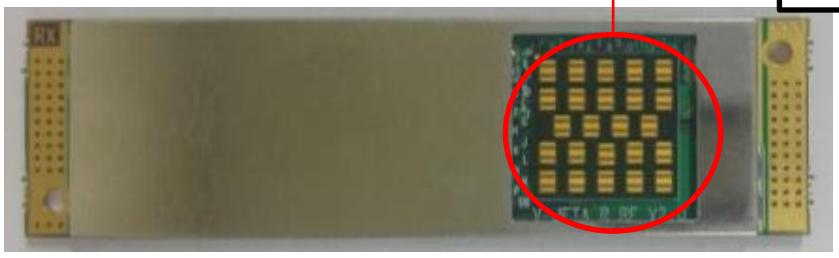
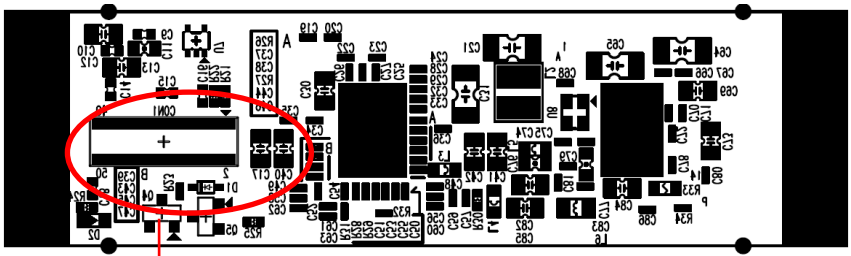
JET-R Module Manual

- ✓ JET-R acts as a receiver for 60GHz RF Module and works in pairs with a JET-T transmitter.
- ✓ Be sure to design the position of the RF radiation direction facing the receiver.
- ✓ The material of case is recommanded for ABS and the thickness is recommended less than 2mm .
- ✓ Full-HD (1080p / 60Hz) in HDMI format - Supports Video and Audio.
- ✓ **This product can be used for fixed point-to-point communication only.**

Module configuration







50 pin connector
Part number : DF40C-50DP-0.4V
pin : HDMI signal, power, debugging signal, control signal

Temperature Test / Connector Feathers

Temperature test report

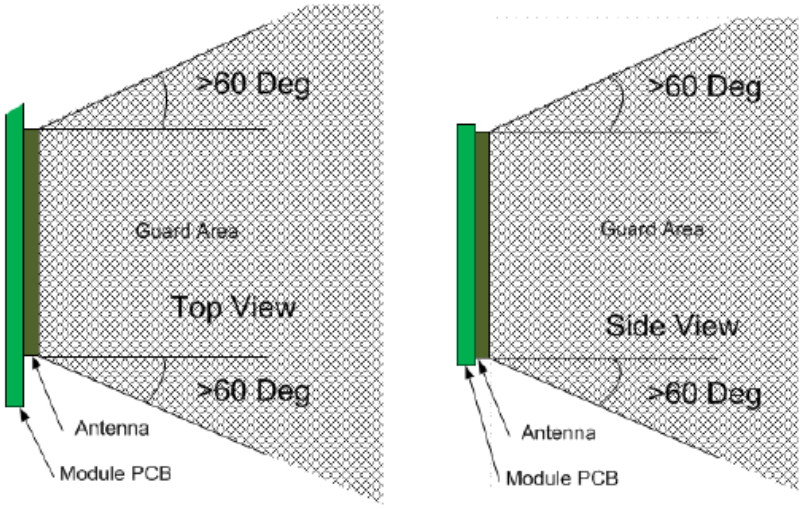
Ambient Temp °C	BB Tc °C	RF Tc °C	Video Link	Test
0	29.8	30.5	Stable	PASS
10	44.9	45.7	Stable	PASS
20	52.5	52.3	Stable	PASS
30	59.1	58.6	Stable	PASS
40	64.1	63.8	Stable	PASS
50	72.8	72.4	Stable	PASS
60	77.5	77.4	Stable	PASS

Single Connector Features

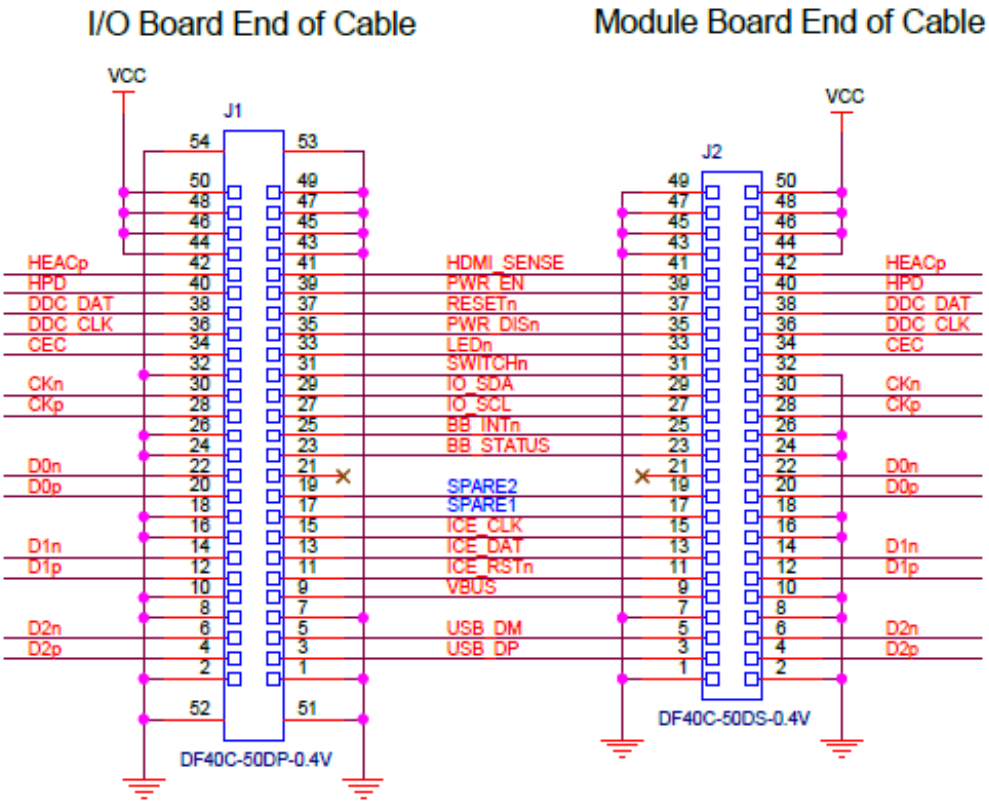
- Power: 3.3 V @ 1 A
- System Control:
  - Status LED signal
  - Source switch signal
  - ON/OFF control signal
  - Sleep mode indication signal
  - ON/OFF indication signal
- Advanced control port
  - I2C interface
- Debug, control, and flash programing
  - USB interface
- Digital video output signal compatible with HDMI signals on the system board

RF radiation angle and Module/System Cable circuit

RF radiation angle



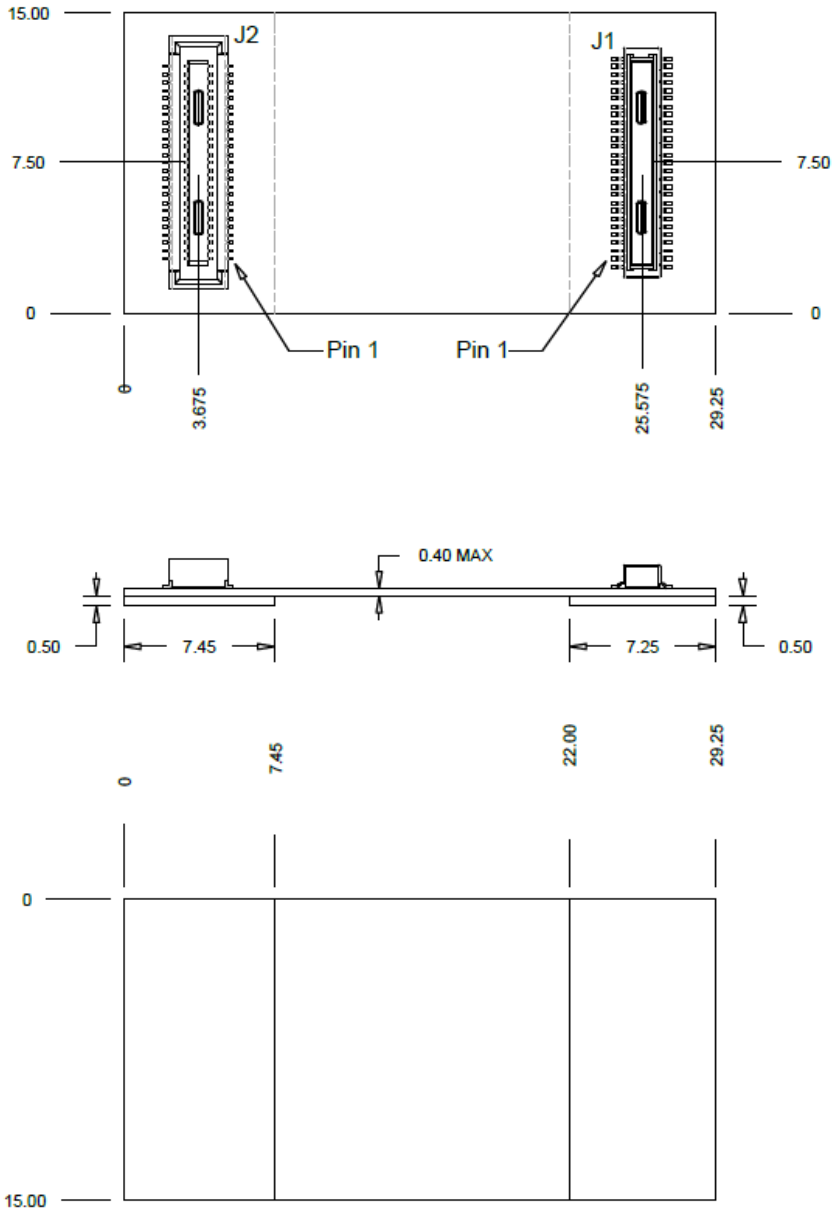
Module/System Cable circuit



FPCB cable for connecting JET-T and IO-board

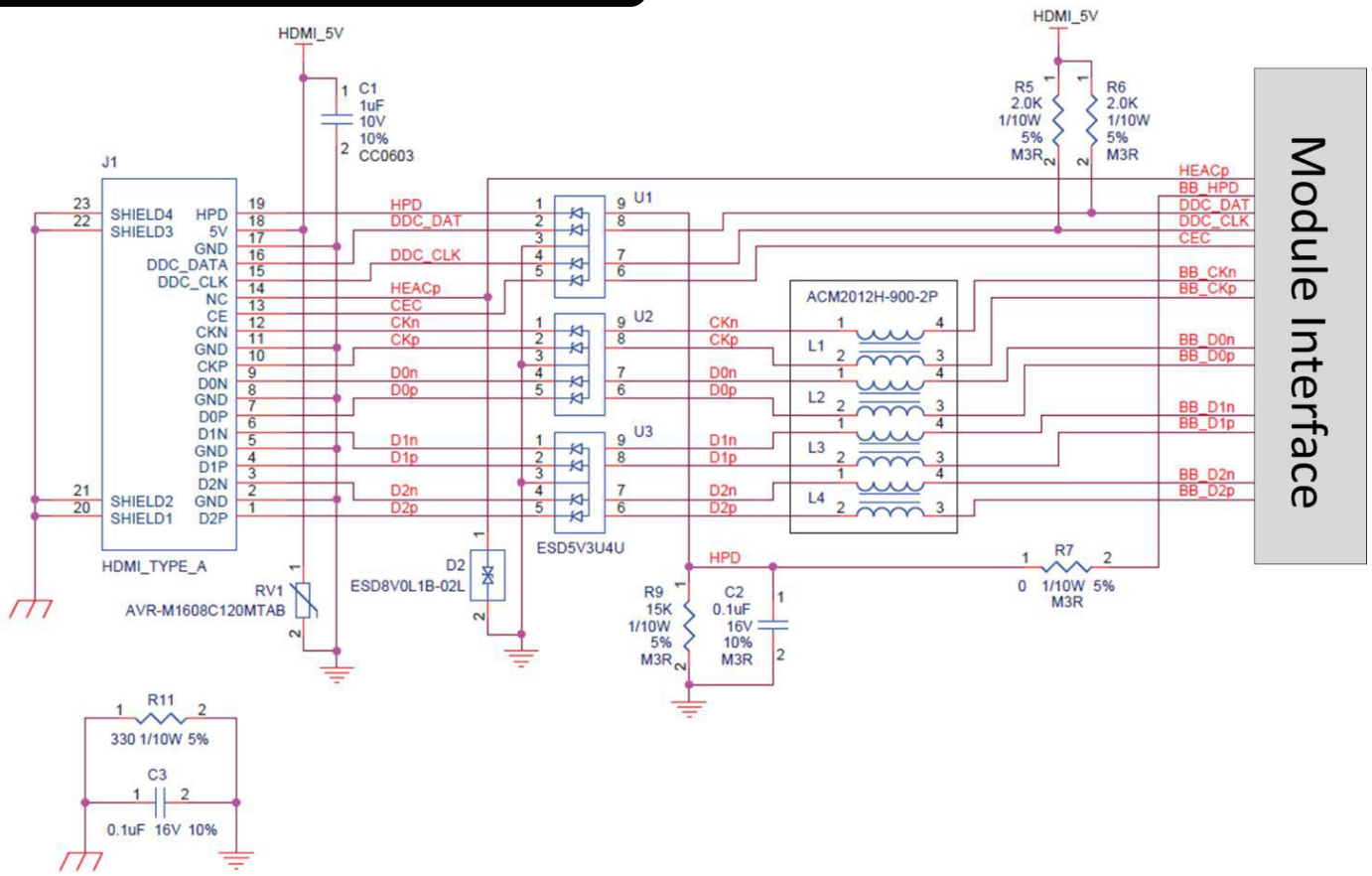
Module/System Cable dimension

- ✓ Flexible PCB Cable is recommanded.
- ✓ Use 3 layer FPCB



HDMI signal connection and module spec.

Reference of HDMI signal



Module spec.

Operating frequency bandwidth	57GHz ~ 64GHz : channel 2(60.48 GHz), channel 3(62.64 GHz)
Transmission distance	10M (depending on the state of the receiver) If there are objects between transmitter and receiver, communication is disturbed.
Temperature	Operating Temperature : -10°C ~ 50°C, Storage Temperature : -10°C ~ 50°C
Power consumption	DC 3.3V / 1A
dimension	65 x 18 x 4.5mm

Federal Communication Commissi on Interference Statement

- 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 interfer ence, and (2) this device must accept any interference received, including inte rference that may cause undesired operation.
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- 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 re sidential installation. This equipment generates, uses and can radiate radio fre quency energy and, if not installed and used in accordance with the instructio ns, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If t his equipment does cause harmful interference to radio or television receptio n, which can be determined by turning the equipment off and on, the user is e ncouraged to try to correct the interference by one of the following measures:
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- - Reorient or relocate the receiving antenna.
- - Increase the separation between the equipment and receiver.
- - Connect the equipment into an outlet on a circuit different fro m that
- to which the receiver is connected.
- - Consult the dealer or an experienced radio/TV technician for h elp.
-
- FCC Caution: Any changes or modifications not expressly approved by t he party responsible for compliance could void the user's authority to operate this equipment.
-
- This transmitter must not be co-located or operating in conjunction wit h any other antenna or transmitter.

- Radiation Exposure Statement:
- This equipment complies with FCC radiation exposure limits set f orth for an uncontrolled environment. This equipment should be install ed and operated with minimum distance 20cm between the radiator & your body.
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- This device is intended only for OEM integrators under the follow ing conditions:

- 1) The antenna must be installed such that 20 cm is maintained bet ween the antenna and users, and
- 2) The transmitter module may not be co-located with any other tra nsmitter or antenna.

- As long as 2 conditions above are 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

- IMPORTANT NOTE: In the event that these conditions can not be met (f or example certain laptop configurations or co-location with another tra nsmitter), then the FCC authorization is no longer considered valid and t he FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end produc t (including the transmitter) and obtaining a separate FCC authorization.

- End Product Labeling
- This transmitter module is authorized only for use in device where the a ntenna may be installed such that 20 cm may be maintained between t he antenna and users. The final end product must be labeled in a visible area with the following: “Contains FCC ID: 2ALI9V-JETRFHD”.
  The grantee's FCC ID can be used only when all FCC compliance requirements are m et.

- Manual Information To the End User
- The OEM integrator has to be aware not to provide information to the e nd user regarding how to install or remove this RF module in the user’s manual of the end product which integrates this module.
- The end user manual shall include all required regulatory information/ warning as show in this manual.