SPECIAL SPECIFICATION

1. FEATURES, ELECTROICAL SPECIFICATION (Ta=25℃)

* AVG-00011 consists of QCA6574AU and a SAMA5D27C-CNVAO.
* QCA6574AU and SAMA5D27C-CNVAO are AEC-Q100 Grade 2 qualified.
* QCA6574AU supports 802.11n 20MHz at 2.4GH
* SAMA5D27C-CNVAO runs on LINUX OS.
* The AVG-00011 has an internal PCB antenna, which is used for RF radiating and receiving.
* The physical layer for communication with external host devices is UART.

-	ITEM	SPEC.
1	RF Frequency Range	IEEE 802.11n : 2412MHz ~ 2462MHz
2	Modulation	IEEE 802.11n : OFDM
3	Supported Bandwidth	20MHz
4	Operating System	LINUX
5	Standard supply voltage	(5.0±0.2)V
6	Total Current (typ)	RX : 110mA TX : 200 ~ 800mA
7	Operation temperature	-40℃ ~ + 105℃

2. ELECTRICAL CHARACTERISTICS

NO	CHARACTERISTIC	TEST CONDITION	802.11 Spec.	TYP.	UNIT
1	Conducted Transmit Power	802.11n Channel6 MCS0	-	15	dBm
		802.11n Channel6 MCS7		13	dBm
2	Transmit Center Frequency Tolerance	802.11n Channel6 MCS0	-60000 ~ 60000	99	Hz
		802.11n Channel6 MCS7		151	Hz
3	Symbol Clock Frequency Tolerance	802.11n Channel6 MCS0	-25 ~ 25	0	ppm
		802.11n Channel6 MCS7		0	ppm
4	Transmitter Constellation Error	802.11n Channel6 MCS0	≤-5	-18	dB
		802.11n Channel6 MCS7	≤-27	-34	dB

5	Conducted Receiver Sensitivity	802.11n Channel6 MCS0	≤-82	-89	dBm
		802.11n Channel6 MCS7	≤-64	-68	dBm

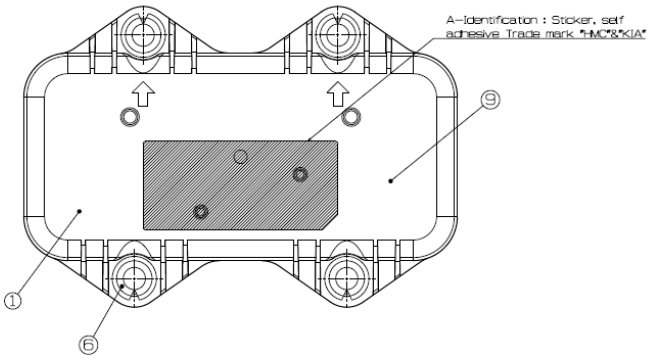
4-1. Absolute Maximum Ratings

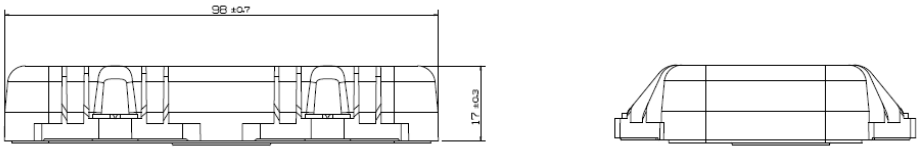
No	D E S C R I P T I O N	SPEC.	UNIT
1	Supply Voltage	5.0 ± 0.25	V
2	Range of Operating Temperature	-40 ~ +105	℃
3	Range of Storage Temperature	-40 ~ +105	
4	Interfaces	UART	

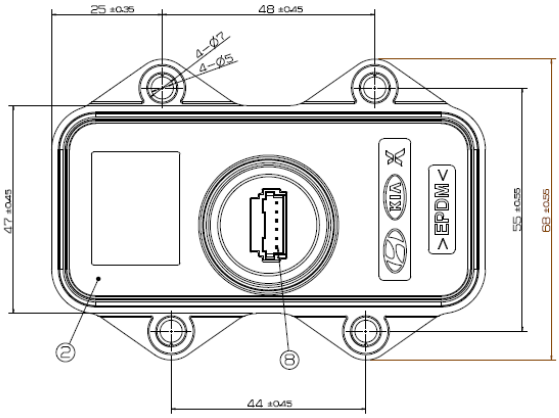
4-2. Pin Connection

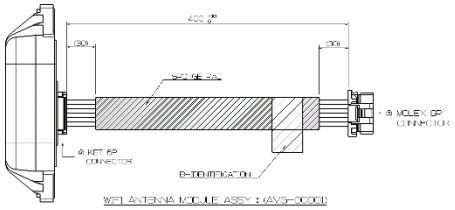
Pin	NAME	Description	I/O
1	VCC	Power supply 5.0V	P
2	GND	Ground	G
3	RESET	Reset signal input (active LOW)	I
4	Reserve	Reserve	I
5	UART RX	UART Data Input	I
6	UART TX	UART Data Output	O

NOTE : I/O I=Input, O=Output, P=Power Supply Voltage, G=Ground









PART LIST

NO	Q'TY	PART NAME	PART NO	MATERIAL	REMARKS
10	1	WIFI ANTENNA MODULE WIRE ASSY	–	–	WIRE : AESSXF 0.3
9	1	A-IDENTIFICATION	–	PAPER (이트지)	43X19
8	1	CONNECTOR	KET_MG645931	–	(MALE TYPE)
7	1	SCREW	–	–	M2 TAPPING (BH-M2_40산/INCH_4L)
6	4	DUF BUSHING	DUF-0505-10	–	흡침 5X10L
5	1	ANTENNA MODULE PCB ASSY	–	FR4	–
4	1	SHIELD CAN #B	–	NICKEL SILVER 압뷱 (C7351)	–
3	1	SHIELD CAN #A	–	NICKEL SILVER 압뷱 (C7351)	–
2	1	RUBBER PAD	–	EPDM	R61000 (MS269-03)
1	1	COVER	–	PP+GF30%	PP-GF30-061 TYPE A (MS213-28)

FCC Information to User

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 con-nected.
• Consult the dealer or an experienced radio/TV technician for help.

Caution

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance Information : 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