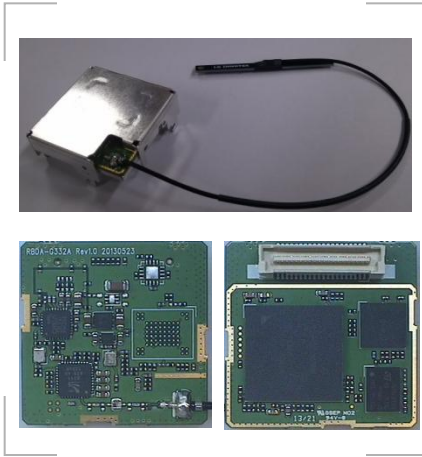


• User Manual



Description

- Model : RBDA-G332A
- Profile : Hands free(1.6), A2DP (1.2), AVRCP (1.4)
- Bluetooth: v3.0+EDR
- Frequency Range : 2402MHz ~ 2480MHz

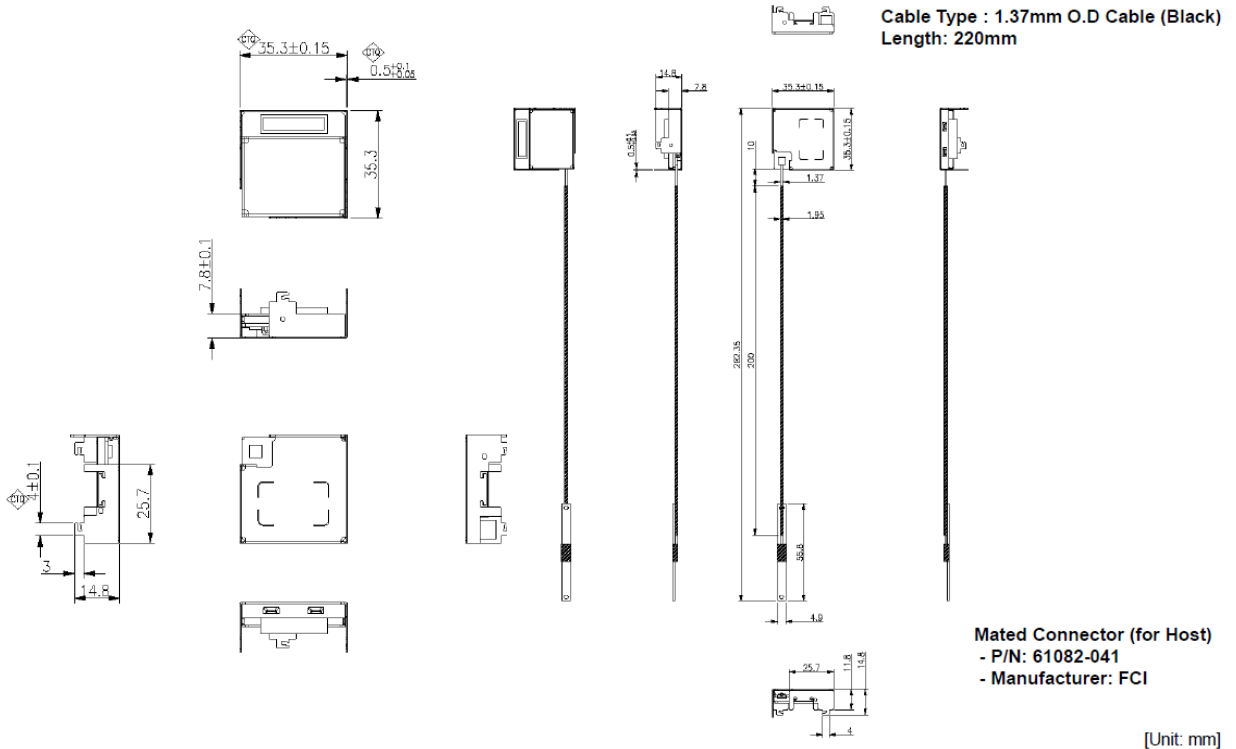
Features

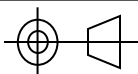
- Dimension : 35.3 X 35.3 X 7.8mm
- Temperature Range : -40°C ~ +85°C
- Supply Voltage : VREGIN – 3.1V to 3.6V
- Output Power
 - BT: Typ. 1dBm(Class 2)
- Sensitivity
 - BT: -80dBm
- Interface
 - BT: UART, I2S

Application

- Automotive

Dimensions



PART NO.		NAME	MATERIAL	SPEC		FINISH	SIZE
Changes	'13.10.10 Deployment					UNIT	SCALE
				DRAW	DSGD	CHKD	APPD
NO	.01			B H Choi	I P Park	K S Kim	User Manual(1/5) DOCUMENT NO. RBDA-G332A(FCC)

*** Power Supply Specification**

The power of DC3.1V ~ 3.6V is should be supplied to the Bluetooth module power(VDD). The module supplies the power to the each block depending on the function. Module input power in excess of the rated input power may cause damage to the internal components. And the influx of Surge and ESD also may lead to the damage of the modem in the vehicle. For the prevention of this, the module is necessary to design block the influx of Sugre and EDS.

Pin NO.	Signal Name	Function (Module case)	MIN	TYP	MAX
13.14	VDD	In	3.1V	3.3V	3.6V

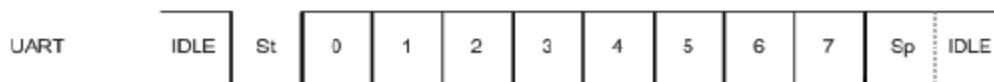
*** Data Tx/Rx Specification**

The Bluetooth modules communicates with other bluetooth devices using Bluetooth communication technology. It has the data buffer used to receive and process data transmitted at 625 μ s time intervals defined in the Bluetooth specification from the remote device. This buffer is enough to process the data sent at the ideal speed(3Mbps). Additionally in order to prevent the buffer overflow, the module could control the transmission by the flow control scheme defined in the Bluetooth specification.

*** UART (RS-232 Interface)**

The module has the UART interface to communicate with other serial devices using the RS232 protocol. the UART parameters such as the packet format and baud rate are configured by the module firmware.

Parameter	Value
Baud rate	115,200 baud
Flow control	None
Parity	None
Number of stop bits	1
Bits per byte	8



PART NO.		NAME		MATERIAL		SPEC		FINISH		SIZE	
NO	Changes '13.10.10 Deployment .0.1						UNIT	SCALE	TITLE User Manual(2/5)		
							DRAW	DSGD			
							B H Choi		I P Park	K S Kim	DOCUMENT NO. RBDA-G332A(FCC)

General Features

RBDA-G332A satisfies the following standards

1) Griffin Bluetooth Module Features

- Bluetooth Power Class 2
- Bluetooth v3.0 + EDR Compliant
- Support for Wide-Band Speech.
- Embedded Fully Bluetooth v2.0/v2.1 + EDR System Compliant
- Embedded Bluetooth Profile
- Embedded AEC/NR Algorithm for Hands-free
- Embedded 16-bits Stereo CODEC
- Operation Voltage is 3.3V Single Power Rail
- Excellent Compatibility with Cellular Telephones
- Command and data Interface is UART
- Audio Input/Output Interface is I2S
- Support Software update by UART
- Support for 802.11 Co-existence
- RoHS Compliant

2) Functionality Key Features : 2.1+EDR

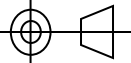
- Secure simple pairing
- Sniff sub-rating
- Encryption pause resume
- Packet boundary flags
- Encryption
- Extended inquiry response

3) Functionality Key Features : 2.0+EDR

- Adaptive frequency hopping (AFH), including classifier
- Faster connection - enhanced inquiry scan (immediate FHS response)
- LMP improvements
- Adaptive Frequency Hopping (AFH) as Master and Automatic Channel Classification
- Fast Connect-Interlaced Inquiry and Page Scan plus RSSI during Inquiry
- Extended SCO (eSCO), eV3 +CRC, eV4, eV5 • SCO handle
- Synchronization

4) Support Profiles

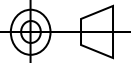
- GAP
- HFP : 1.6
- A2DP : 1.2
- AVRCP : 1..4
- PBAP : 1.1
- MAP : 1.0
- SPP : 1.1

PART NO.		NAME		MATERIAL		SPEC		FINISH		SIZE	
							UNIT	SCALE			
Changes	'13.10.10 Deployment					DRAW	DSGD	CHKD	APPD	TITLE	
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PIN Description

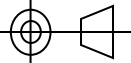
No.	Pin Name	Function	I/O	Description
1	MIC1N	Analog Mic. Input	I	Microphone Analog Negative Input (1 Channel)
2	MIC1P		I	Microphone Analog Positive Input (1 Channel)
3	MIC2P		I	Microphone Analog Positive Input (2 Channel)
4	MIC2N		I	Microphone Analog Negative Input (2 Channel)
5	FTS_UART_CTS	FTS Logger Interface (Bluetooth)	I	Clear to Send data
6	FTS_UART_RTS		O	Request to Send data
7	FTS_UART_RX		I	Receiving data for SCIF (Serial Communication Interface with FIFO)
8	FTS_UART_TX		O	Sending data for SCIF (Serial Communication Interface with FIFO)
9	Reset#	Reset Port	I	Reset if low. Input debounced so must be low for >1000ms to cause a reset
10	HOST_UART_RX	Host UART Interface	I	Receiving data for SCIF (Serial Communication Interface with FIFO)
11	HOST_UART_TX		O	Sending data for SCIF (Serial Communication Interface with FIFO)
12	DGND	Digital GND	-	Digital Ground
13	VDD	VDD3V3	-	System Power Supplied with 3.3V
14	VDD	VDD3V3	-	System Power Supplied with 3.3V
15	DGND	Digital GND	-	Digital Ground
16	I2S_OUT	I2S Interface	O	Serial Audio data Out for Stereo
17	I2S_IN		I	Serial Audio data In for Stereo
18	I2S_CLK		I/O	Serial Audio data bit clock
19	I2S_WS		I/O	Serial Audio data word selection
20	DGND	Digital GND	-	Digital Ground

PART NO.		NAME		MATERIAL		SPEC		FINISH		SIZE	
							UNIT	SCALE			
Changes	'13.10.10 Deployment					DRAW	DSGD	CHKD	APPD	TITLE	
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NO	.0.1									DOCUMENT NO. RBDA-G332A(FCC)	



PIN Description

No.	Pin Name	Function	I/O	Description
21	DGND	Digital GND	-	Digital Ground
22	PIO	PIO	I/O	Programmable input/output port
23	PIO (AEC/NR)	PIO	O	Programmable input/output port (AEC/NR Logging)
24	TDI	JTAG Interface	I	Serial input pin for instructions and data
25	TDO		O	Serial output pin for instructions and data
26	TCK		I	Test clock input pin
27	TMS		I	Test-mode select signal input pin
28	TRST#		I	Initialization-signal input pin
29	IRQOUT#/AUDCK	Interrupt I/O	O	Not Connected
30	DEBUG_UART_TX	Debug UART Interface	I	Receiving data for SCIF (Serial Communication Interface with FIFO)
31	DEBUG_UART_RX		O	Sending data for SCIF (Serial Communication Interface with FIFO)
32	UART(RxD0)_RESERVE	UART Input	I	UART Rx (Port0) only for LGIT Debug.
33	ASEBRKAK#/ASEBRK#	Emulator	I/O	Emulator break input pin
34	ASEMD#		I	ASE Mode if low, and then Emulator function is enabled
35	AUDSYNC#		O	Emulator Audio Sync pin
36	WLAN_DENY	WLAN Co-exist	I	Programmable input/output port (Co-existence:WLAN DENY)
37	BT_STATUS		O	Programmable input/output port (Co-existence:BT Status)
38	BT_ACTIVITY		O	Programmable input/output port (Co-existence:BT ACTIVITY)
39	BT_PERIODIC		O	Programmable input/output port (Co-existence:BT PERIODIC)
40	DGND	Digital GND	-	Digital Ground

PART NO.		NAME	MATERIAL	SPEC	FINISH	SIZE		
					UNIT	SCALE		
Changes	'13.10.10 Deployment			DRAW	DSGD	CHKD	APPD	TITLE
				B H Choi		I P Park	K S Kim	User Manual(5/5)
NO	0.1							DOCUMENT NO. RBDA-G332A(FCC)



RSS-GEN 7.1.3 User manual Notice for Licence-Exempt Radio Appartus.

This device complies with Industry Canada licence-exempt RSS standard(s). 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.

L'exploitation est autoris e aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radio lectrique subi, m me si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC Statement

FCC Part 15.19

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

FCC Part 15.21

Any changes or modifications (including the antennas) to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

Part 15.105 (B)

Note : 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 or more 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.

Modifications not expressly approved by the manufacturer could void your authority to operate the equipment under FCC rules.

RF Exposure Statement (2.1091)

FCC RF Radiation Exposure Statement: FCC RF Radiation Exposure Statement: This equipment complies with FCC RF Radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

RF du FCC d'exposition aux radiations: Cet équipement est conforme à l'exposition de la FCC rayonnements RF limites établies pour un environnement non contrôlé. L'antenne pour ce transmetteur ne doit pas être même endroit avec d'autres émetteurs sauf conformément à la FCC procédures de produits Multi-émetteur.

Cet équipement doit être installé et utilisé avec une distance minimale de 20cm entre le radiateur et votre corps.

* Information for OEM integrator

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user manual of the end product.

The user manual which is provided by OEM integrators for end users must include the following information in a prominent location.

“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 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.”

Label for end product must include “Contains FCC ID: YZP-RBDAG332A, IC: 7414A-RBDAG332A” or “ A RF transmitter inside, FCC ID: YZP-RBDAG332A, IC: 7414A-RBDAG332A”.

* Information pour les OEM intégrateur

L'intégrateur OEM doit être conscient de ne pas fournir des informations à l'utilisateur final concernant la façon d'installer ou de retirer ce module RF dans le manuel utilisateur du produit final.

Le manuel de l'utilisateur qui est fourni par les intégrateurs OEM pour les utilisateurs finaux doivent inclure les renseignements suivants dans un endroit bien en vue.

«Pour se conformer aux exigences de conformité d'exposition RF de la FCC, l'antenne utilisée pour ce transmetteur doit être installé pour fournir une distance de séparation d'au moins 20 cm de toute personne et ne doit pas être co-localisés ou fonctionnant en conjonction avec une autre antenne ou transmetteur. ”

Étiquette pour le produit final doit inclure "Contient FCC ID: YZP-RBDAG332A, IC: 7414A-RBDAG332A" ou "A l'intérieur du transmetteur RF, FCC ID: YZP-RBDAG332A, IC: 7414A-RBDAG332A".