



AMPAK Technology Inc.

Advanced Module Packaging Solution

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CC2564MODNEM

User manual

Revision History

Date	Revision Content	Revised By	Version
2013/12/24	Initial released	Rue	1.0



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1. CC2564MODN evaluation module introduction

CC2564MODN evaluation module (EM) likes as figure1. That is designed for Bluetooth 2.1+EDR application. The bottom views like as figure2. It is also designed for TI's MSP430 experimenter board. It is subject to provide a convenient environment for customer's verification on Bluetooth function. There are controller pins on evaluation board which describes as below.

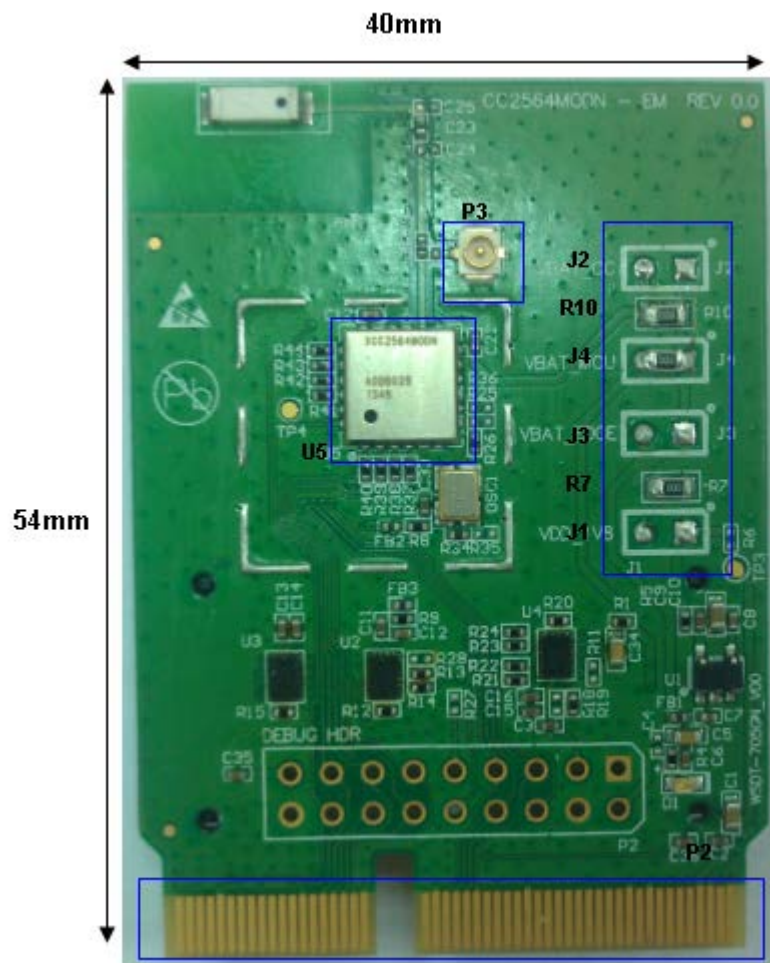


Figure1. Top view of CC2564MODNEM



Figure2. Bottom view of CC2564MODNEM

Interface highlights:

1. U5: CC2564MODN SIP module.
2. P3: U.FL connector let RF signal in/out path, which R30 need tie on 0ohm.
3. J4: VBAT_MCU: 3V3 for main system power path form RF2.
4. J3: VBAT_EDGE: 3V3 for main system power path form P2
5. J2&R10: VBAT_CC: 3V3 for CC2564MODN main power
6. J1&R7: VDO_1V8: V8 for system IO level path
7. RF1&RF2&P2: For TI's experimenter board IO used.

2. PIN Description/ Operating Ratings/ Operating temperature

2.1 PIN Description

Connector	No.	Pin Name	Def. Dir.	Description of Options (Common)
RF1	1,19	GND		Connect to ground
	3	HCI_CTS_3V3	I	HCI UART clear-to-send
	5	SLOW_CLK_3V3	I	32.768-KHz clock in
	7	HCI_RX_3V3	I	HCI UART data receive
	9	HCI_TX_3V3	O	HCI UART data transmit
	others	Not connected		
RF2	2	GND		Connect to ground
	7,9	+3V3	I	Connect to +3.3V
	8	AUD_OUT_3V3	O	PCM data output
	10	AUD_IN_3V3	I	PCM data input
	11	AUD_FSYNC_3V3	I/O	PCM frame synch
	17	AUD_CLK_3V3	I/O	PCM clock
	18	HCI_RTS_3V3	O	HCI UART request-to-send
	19	nSHUTD_3V3	I	Shutdown input (active low)
	others	Not connected		

Connector	No.	Pin Name	Def. Dir.	Description of Options (Common)
P2	1	SLOW_CLK_EDGE	I	32.768-KHz clock in
	8	1V8_IN	I	Connect to +1.8V
	52	AUD_CLK_1V8	I/O	PCM clock
	54	AUD_FSYNC_1V8	I/O	PCM frame synch
	56	AUD_IN_1V8	I	PCM data input
	58	AUD_OUT_1V8	O	PCM data output
	66	HCI_TX_1V8	O	HCI UART data transmit
	68	HCI_RX_1V8	I	HCI UART data receive
	70	HCI_CTS_1V8	I	HCI UART clear-to-send
	72	HCI_RTS_1V8	O	HCI UART request-to-send
	76	TX_DEBUG_1V8	I	DEBUG port use
	89	nSHUTDOWN_1V8	I	Shutdown input (active low)
	3, 9, 19, 37, 47, 63, 77, 83, 87, 95, 97,	GND		Connect to ground
	2, 6, 18, 22, 42, 60, 64, 92	GND		Connect to ground
	others	Not connected		

2.2 Operating Ratings

Test conditions: At room temperature 25°C				
Description	Min.	Typ.	Max.	Unit
Input supply Voltage	2.2	3.3	4.85.5	V

2.3 Operating temperature

Operating temperature	-40°C to 85°C
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3. 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: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

4. Industry Canada statement

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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et*
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

Radiation Exposure Statement:

The product comply with the Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

Déclaration d'exposition aux radiations:

Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé. Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel. La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.