

# A7105 module specification

## CM2401PA06

### Revision History

Rev. No.	History	Issue Date	Remark
1.0	Initial issue CM2401PA06	July-2019	Preliminary

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## 1.General Description

The CM2401PA06 module is designed for 2.4GHz ISM band wireless applications using AMICCOM A7105 FSK/GFSK transceiver. This module features a fully programmable frequency synthesizer by SPI. The maximum data rate is 500Kbps

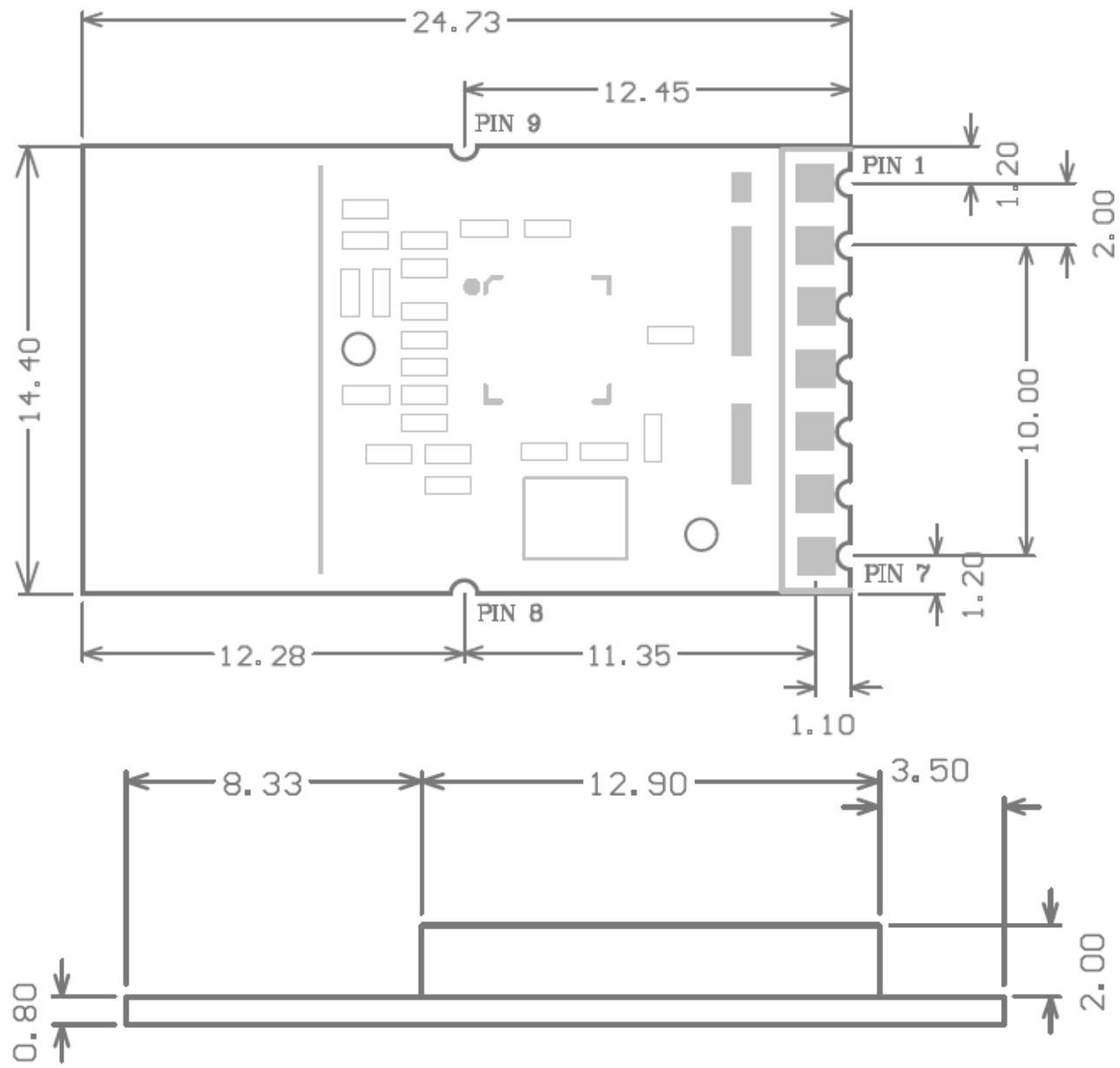
## 2. Electrical specification

Item	Specification	Remark
Supply voltage	2.0V-3.6V	
Current consumption	1.5uA @Sleep mode 0.3mA @Idle mode 1.9mA @Stand-by mode 16mA @Rx mode 20mA @Tx mode (Pout = 0dBm)	typical
Frequency	2400 – 2483 MHz	ISM band
Transmit output power	0 dBm @ room temperature	Typical
Rx sensitivity	-107 dBm (typical) @ 2Kbps mode, Dev = 124 KHz -104 dBm (typical) @ 25Kbps mode, Dev = 124 KHz -97 dBm (typical) @ 250Kbps mode, Dev = 186 KHz -95 dBm (typical) @ 500Kbps mode, Dev = 186 KHz	Typical, BER $\leq 1E-3$ ,
Modulation	FSK or GFSK	
Transmission distance	18 meter	
Interface	7 pin 2mm header, 2 pin header	
Mechanical Dimensions	24.73mm(L) x 14.4mm(W) x 2.8mm(H)	
Operating temperature	-20°C ~ +70°C	

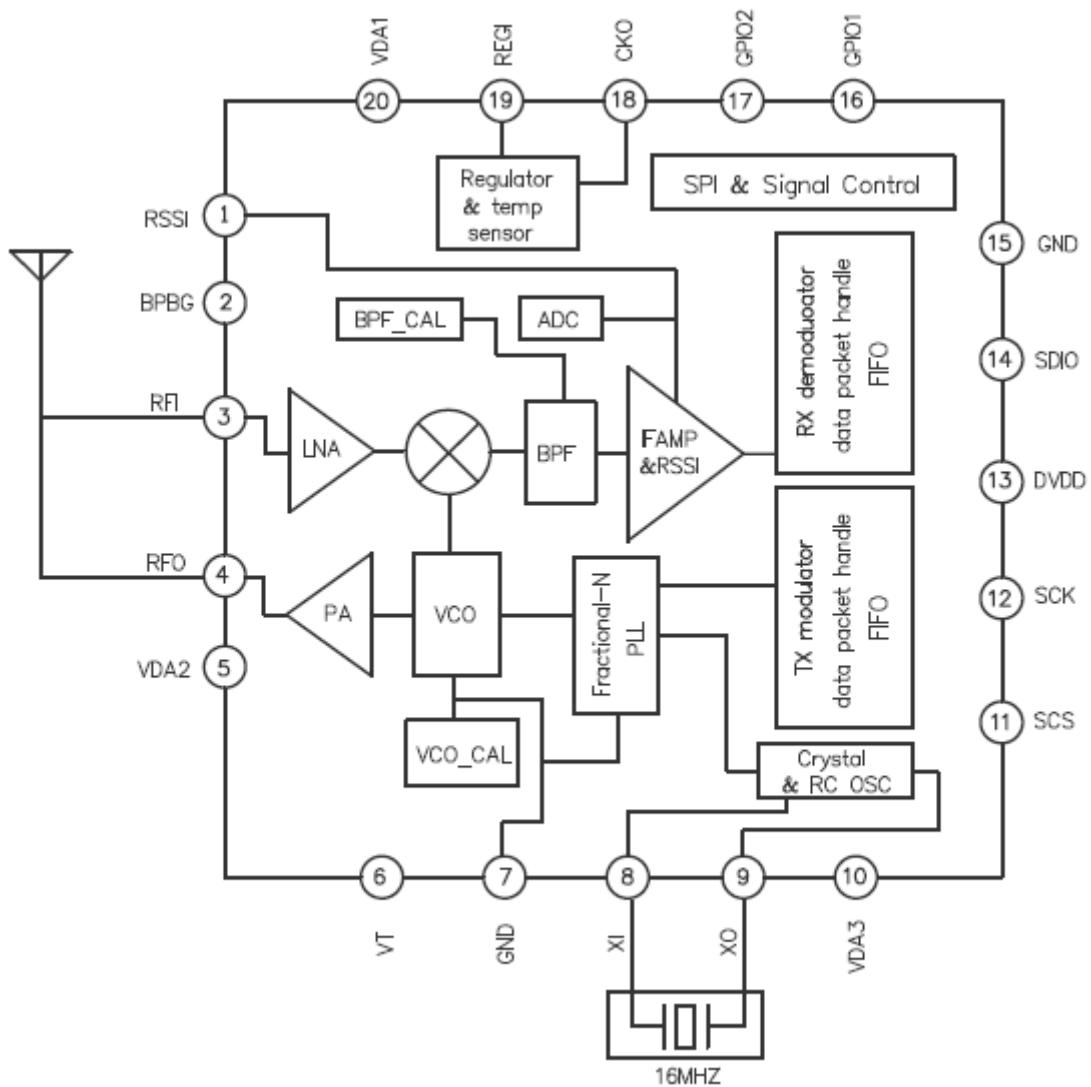
### 3.Interface

Pin No.	Pin name	Comment	Note
1	VIN	RF Module Supply Voltage Input	2.0V-3.6V
2	GIO2	General Purpose I/O 2	
3	GIO1	General Purpose I/O 1	
4	SDIO	SPI Data I/O	
5	SCK	SPI Clock	
6	SCS	SPI Chip Selection	
7	GND	Ground	
8	GND	Ground	
9	GND	Ground	

#### 4. Module packaging information



## 5. Module Block Diagram



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

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

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.

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.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:(1) This device may not cause interference. (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.

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

when this modular was installed to a host device, the host device should be labeled with "contains FCCID:2AT2Y-A7105 or IC:25310-A7105"