

Sysgration Ltd.

2.4GHz Keyboard/Mouse Module

Specification June, 2001 P1/1

◆ APPLICATION & FEATURES:

Technology's 2.4GHz Keyboard/Mouse modules use FSK technology to provide ISM band wireless data connection. Multi channels are specially designed to enhance the function of automatic frequency tuning as well as digital PLL & μ P Technology.

The major applications can be the followings:

- Wireless Keyboard/Mouse/Joystick Communication.
- Wireless Remote Control System.

The features are:

- Compact Size & Low Cost.
- Multi Channel Support 16 users.
- Low Power Consumption.

● Module electrical specification

TX module:

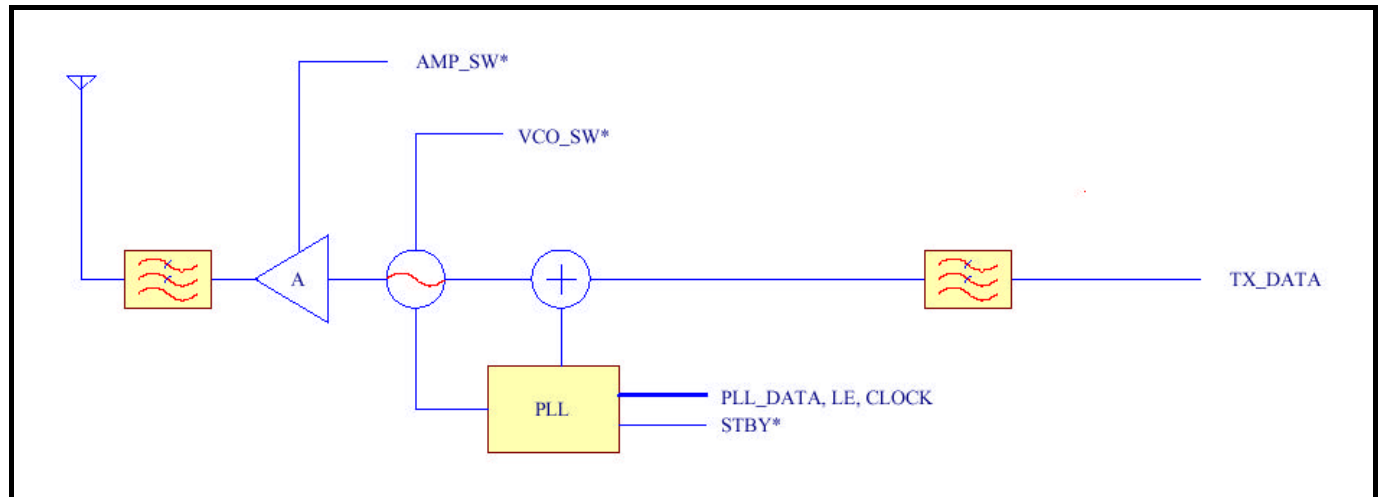
ITEM	SPEC	REMARK
Frequency	2400 MHz ~ 2483 MHz	
Tx Power	-4 ~ -2 dBm	
Modulation Type	FSK	
Channel Spacing	5 MHz	
Channel Number	16	
Transmission distance	2 meters	
Supply Voltage	3 V	
Current Consumption	15 mA @working mode 50 uA @stop mode	Typical
Antenna Type	PCB Track	
Base-band Interface	2 mm Pitch Pin Header	
Dimension	31.1W x 28.6D x 3H	Unit is mm
Operating Temperature	0 ~ 50 °C	

RX module:

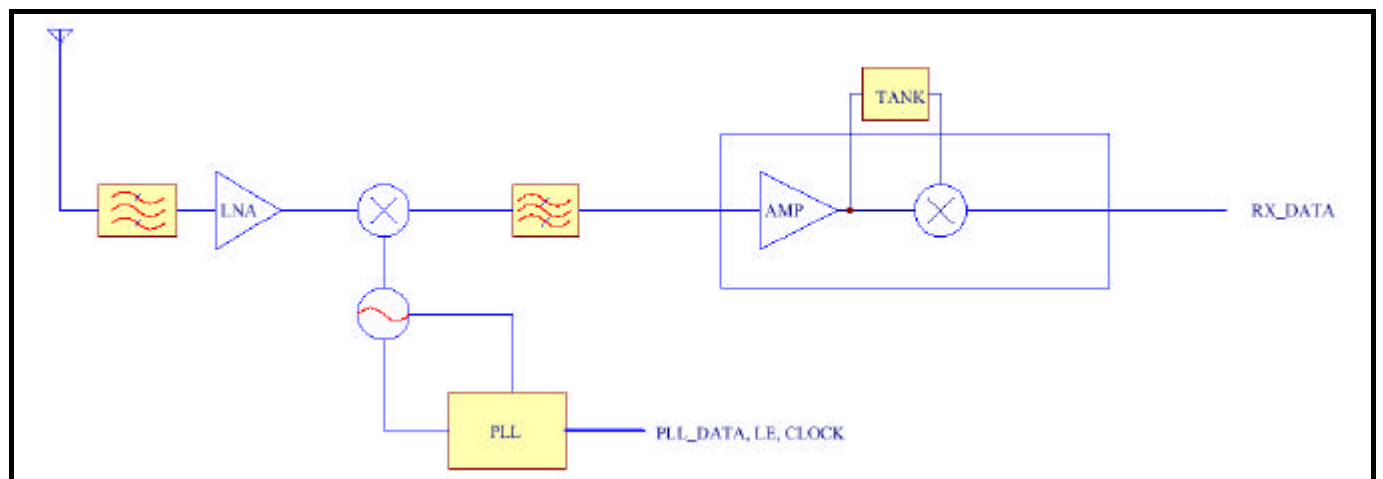
ITEM	SPEC	REMARK
Frequency	2400 MHz ~ 2483 MHz	
Rx Sensitivity	-80 dBm	Minimum
Demodulation Type	FSK	
Channel Spacing	5 MHz	
Channel Number	16	
Supply Voltage	5 V	
Current Consumption	40 mA	Typical
Antenna type	PCB Track	
Base-band Interface	2 mm Pitch Pin Header	
Dimension	63.9W x 29.5D x 4H	Unit is mm
Operating Temperature	0 ~ 60 °C	

- KMJ module block diagram

TX module:

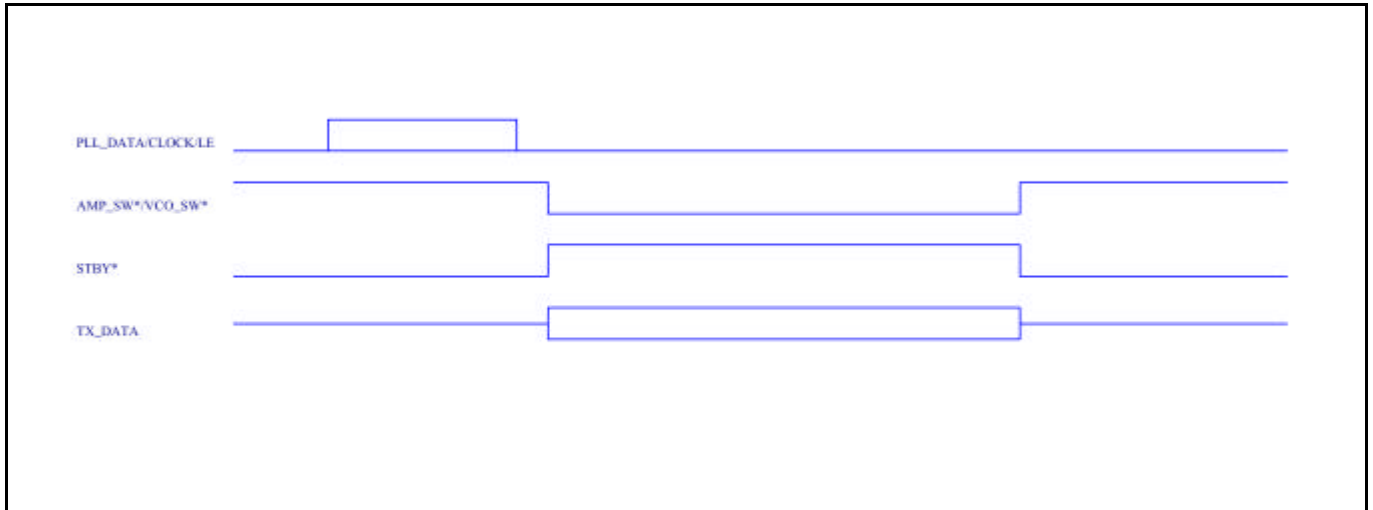


RX module:

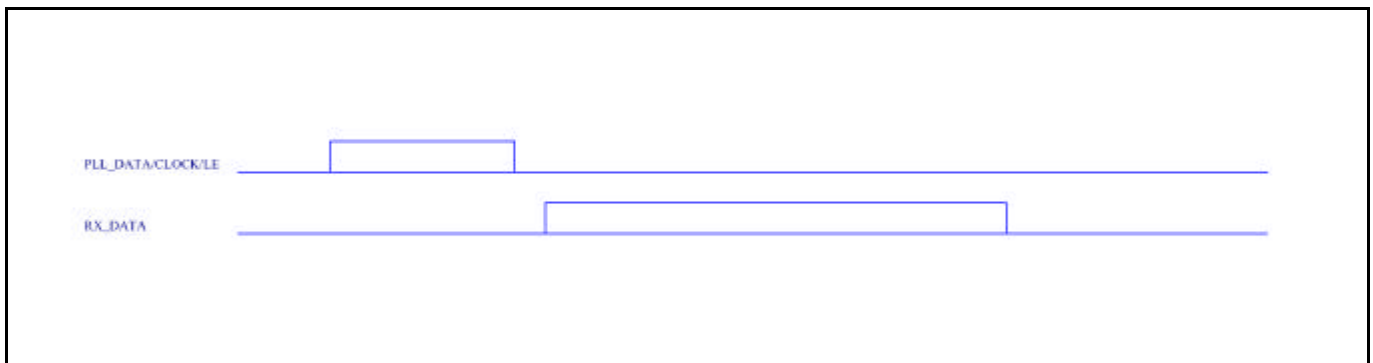


- KMJ module timing diagram

TX module:



RX module:



- KMJ module pin description**

TX module:

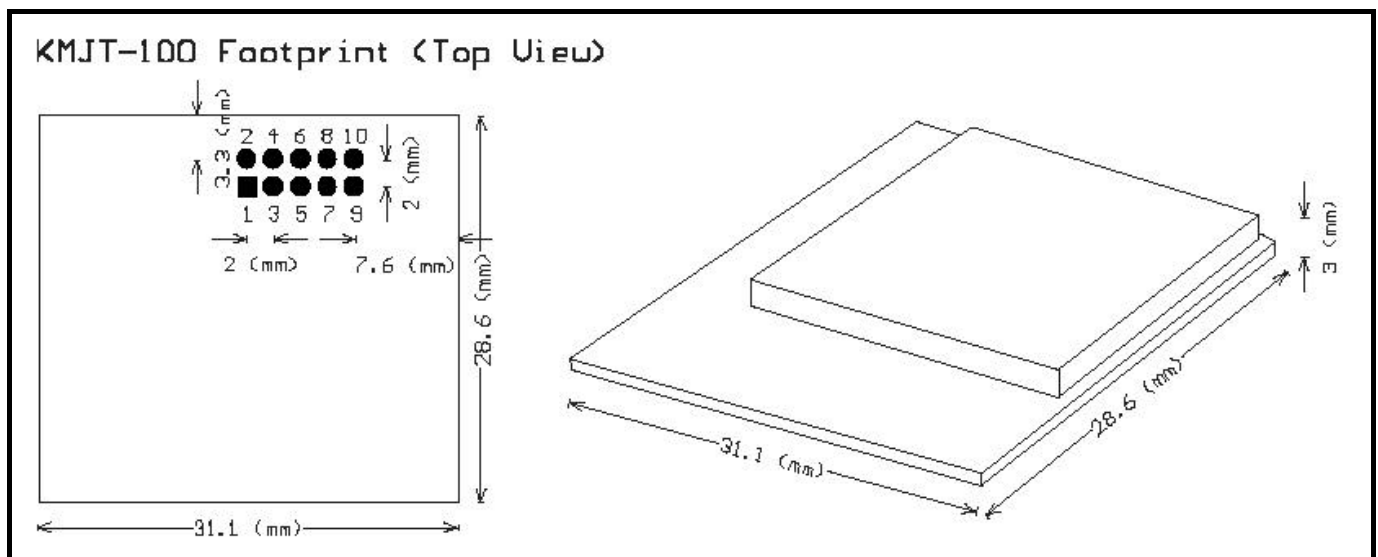
Pin no.	Pin name	I/O	Descriptions
1	OSC	I	Oscillator input
2	STBY*	I	Stand by mode control
3	PLL_CLOCK	I	PLL clock
4	PLL_DATA	I	PLL serial data
5	PLL_LE	I	PLL latch enable
6	AMP_SW*	I	RF amplifier switch
7	GND	-	Ground
8	TX_DATA	I	Modulation data input
9	VCO_SW*	I	RF VCO switch
10	Vcc	-	Power supply voltage, 2.4 to 3.3 Vdc

RX module:

Pin no.	Pin name	I/O	Descriptions
1	PLL_DATA	I	PLL serial data
2	OSC	I	Oscillator input
3	PLL_LE	I	PLL latch enable
4	PLL_CLOCK	I	PLL clock
5	GND	-	Ground
6	RX_DATA	O	Modulation data input
7	GND	-	Ground
8	Vcc	-	Power supply voltage, 4.5 to 5.5 Vdc

- KMJ module dimension drawing**

TX module:



RX module:

