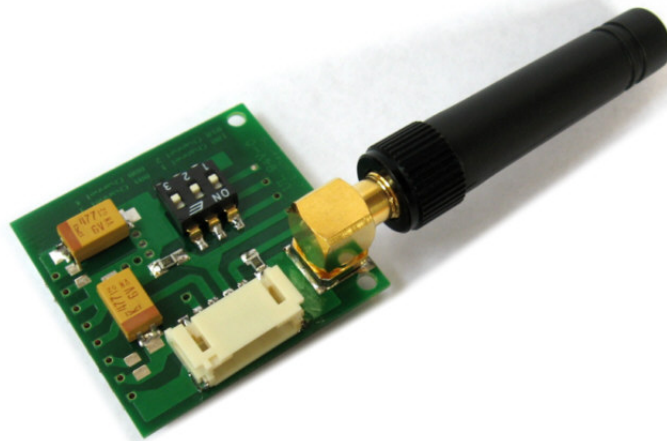


Video Transmitter Module TXM1

Datasheet



Revision History

Revision	Change
V1.0	Initial version
V1.1	Note about different supply voltages
V1.2	Note about supply voltage and suggested voltage regulators

Overview

The purpose of this module is to provide the environment and connections for a video sender module (e.g. 2.4GHz AWM633) which is used to modulate a video signal to a HF signal.

Features

- SMA connector for standard high frequency antennas.
- Small size of 32x33mm (1.26x1.3 inches)
- Contains all electrical components for the sender unit
- 4 selectable frequency channels
- Support of high power, medium power and low power HF transmitters.
- Support of straight or right angle SMA connectors
- Provides 1 video channel and 2 independent audio channels
- Convenient external interface
- Not limited to 2.4GHz frequencies

Configurations

Usually the module is already equipped with a sender unit. Naming convention:

TXM1 – [sender module] – [antenna connector]

Sender module: type of sender unit

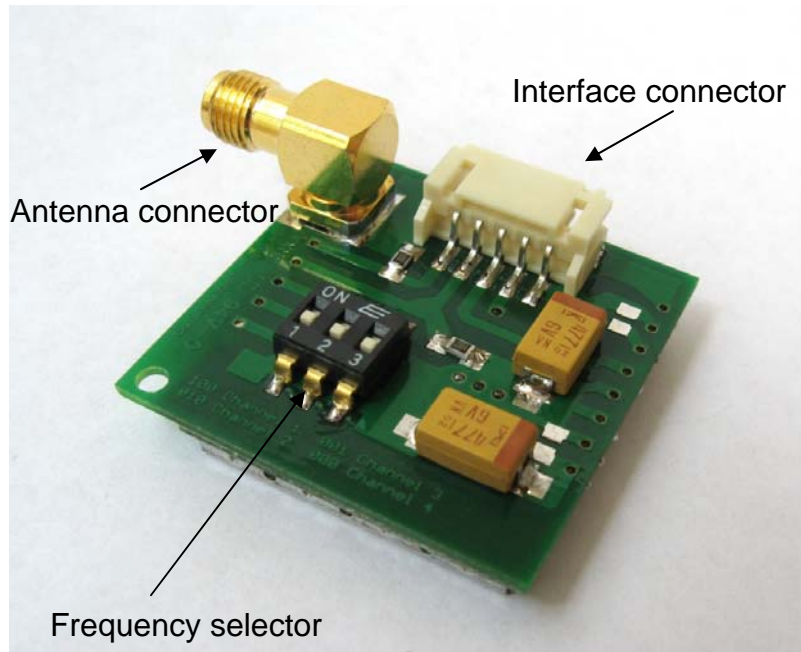
AWM631 = 40mW (16dBm), 5V, 2.4GHz sender
AWM632 = 10mW (9dBm), 3.3V, 2.4GHz sender
AWM633 = 450mW (27dBm), 3.3V, 2.4GHz sender

Antenna connector: orientation of SMA connector

R = Right angle
S = Straight

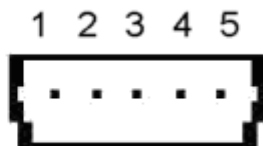
Example: TXM1 – AWM633 – R is shown below

Board Layout



Interface Connector Front View

Please see the specification of the transmitter module for details of supply voltage, current draw and signal levels.



- 1: Supply (usually 3.3V, see sender module)
- 2: GND
- 3: Video Signal
- 4: Audio Left Channel
- 5: Audio Right Channel

Frequency Channel Selector

Please see the specification of the transmitter module for details on frequency band information.

Switch 1	Switch 2	Switch 3	Channel
On	Off	Off	1
Off	On	Off	2
Off	Off	On	3
Off	Off	Off	4

Voltage Supply

If you exceed the maximum voltage of the module you will damage it. There is a maximum tolerance of +/- 3%. This means that a 3.3V module can be supplied with 3.2 to 3.4V, a 5V module with 4.9 to 5.1V. Based on your available system voltage you may need a linear voltage regulator or dc/dc converter.

Connecting a LiPo or Lithium-Ion battery to a 3.3V module will damage it.
A diode (which has an undefined voltage drop) will not work reliable and damage it.

See table for suggested voltage regulators:

Module voltage	System voltage 3.6V (1 LiPo battery)	System voltage 7.2V (2 LiPo batteries)	System voltage 9V or higher
3.3V	Linear regulator with drop voltage lower 0.3V	DC/DC stepdown converter	DC/DC stepdown converter
5V	DC/DC stepup converter	Linear regulator or DC/DC stepdown converter	DC/DC stepdown converter

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