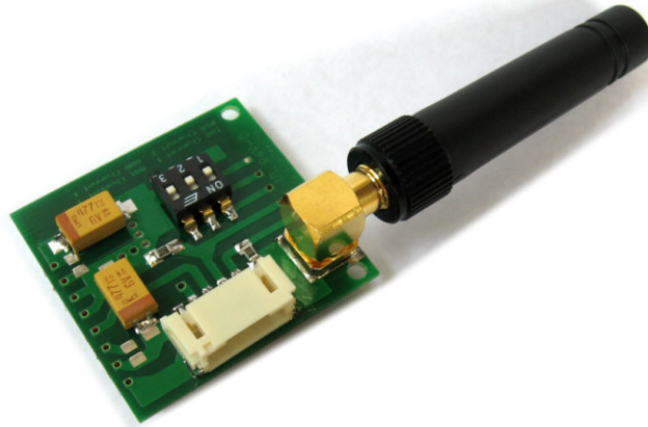


Video Transmitter Module TXM1

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

Note: Not compliant with RoHS, exempt by RoHS Product Category 9 based on Review of Directive 2002/95/EC (RoHS)

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

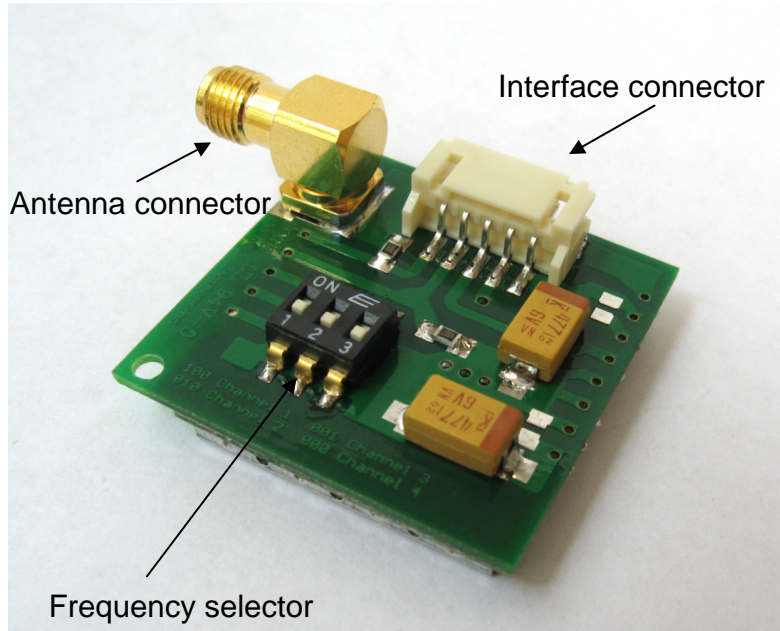
AWM631 = 40mW (16dBm), 5V, 2.4GHz sender
AWM632 = 10mW (9dBm), 3.3V, 2.4GHz sender
AWM633 = 450mW (27dBm), 3.3V, 2.4GHz sender

Antenna connector: orientation of SMA connector

R = Right angle
S = Straight

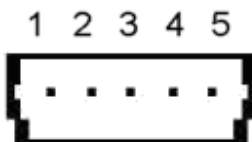
Example: TXM1 – AWM633 – R is shown below

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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Video Transmitter Module TXM1

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