



# AWM620RX-INV

2.4GHz Video/Audio RF Module

22-Oct-04 P1/4

## TECHNICAL SPECIFICATION

### General:

|  |                                      |
|--|--------------------------------------|
| Operation Frequency Range                | 2400 ~ 2483MHz                       |
| Channel Selection                        | PLL Synthesizer, 4ch. <sup>(1)</sup> |
| Video-Audio Modulation/Demodulation Type | FM-FM                                |
| Supply Voltage                           | DC + 5V                              |
| Supply Current                           | 152mA ~ 163mA @-70dBm RF in          |

### Receiver:

|   |  |
|---|--|
| Input Signal Level Range  | -85~-10dBm   |
| Adjacent Channel Power Rejection  | -20dBm, typ. ( $\pm 3$ dB)                         |
| <b>Video</b>  |  |
| Output Impedance  | 75 $\Omega$ , typ.                                 |
| Output Signal Level   | 1V <sub>P-P</sub> , typ. ( $\pm 0.2$ Volt)         |
| Frequency Response  | $\pm 5$ dB, max. 50Hz~5.5MHz                       |
| Differential Gain   | $\pm 5\%$ , max.                                   |
| Differential Phase  | $\pm 5$ Deg., max.                                 |
| S/N Ratio (100KHz, 1V <sub>P-P</sub> Sine Wave)                           | 45dB, min.   |
| Video Polarity (Referred to pin12)  | Internal Pull-High: Positive<br>Pull-Low: Negative |
| <b>Audio</b>  |  |
| Output Impedance  | 600 $\Omega$ , typ.                                |
| Output Frequency Range  | 50Hz ~ 20KHz                                       |
| Output Signal Level (Modulation Signal :<br>50Hz~15KHz Sine Wave)         | 3V <sub>P-P</sub> , typ. ( $\pm 0.2$ Volt)         |
| Harmonic Distortion (THD)<br>(50Hz~15KHz, 0.5V <sub>P-P</sub> Sine Wave ) | 1.5%, max.   |
| S/N Ratio (50Hz ~ 15KHz)  | 50dB, typ. ( $\pm 3$ dB)                           |
| Subcarrier Frequency  | 6MHz, 6.5MHz                                       |
| Subcarrier Frequency Accuracy   | $\pm 50$ KHz                                       |
| <b>RSSI</b>   |  |
| RSSI Output Voltage(RF Input -45~-85dBm)                                  | 1.5 ~ 3.3V   |

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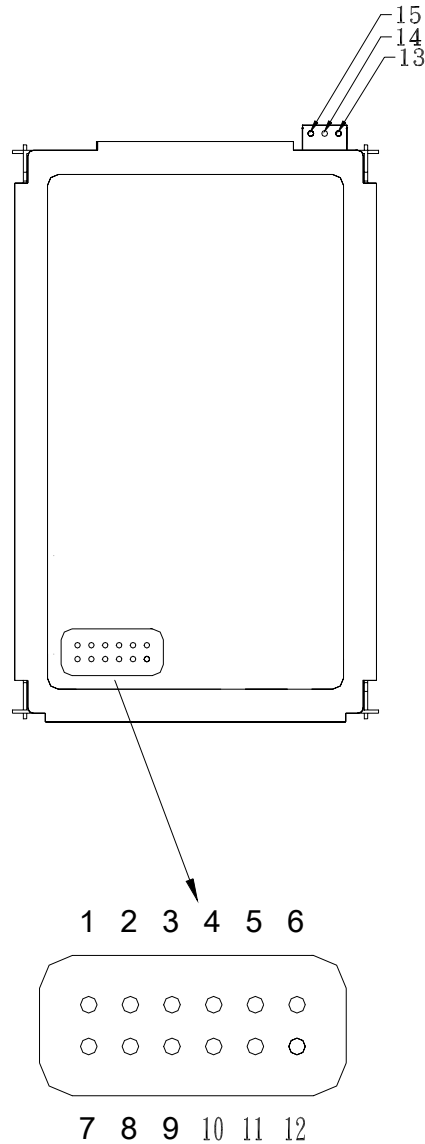
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## Pin Description

|    |                  |
|----|------------------|
| 1  | Video            |
| 2  | 5v               |
| 3  | GND              |
| 4  | Audio/R          |
| 5  | Audio/L          |
| 6  | (LE)             |
| 7  | RSSI             |
| 8  | CH1<br>(Data)    |
| 9  | CH2              |
| 10 | CH3              |
| 11 | CH4 (CLK)        |
| 12 | Video<br>Control |
| 13 | GND              |
| 14 | ANTENNA          |
| 15 | GND              |



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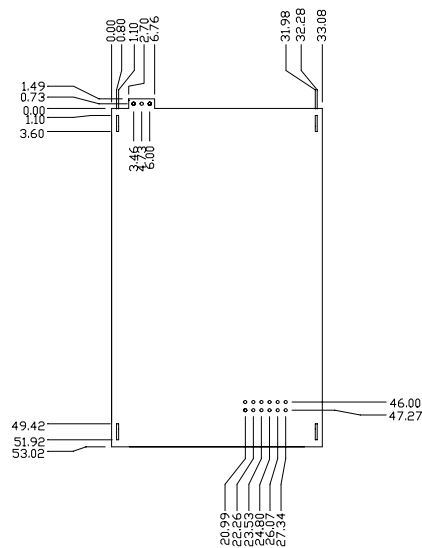
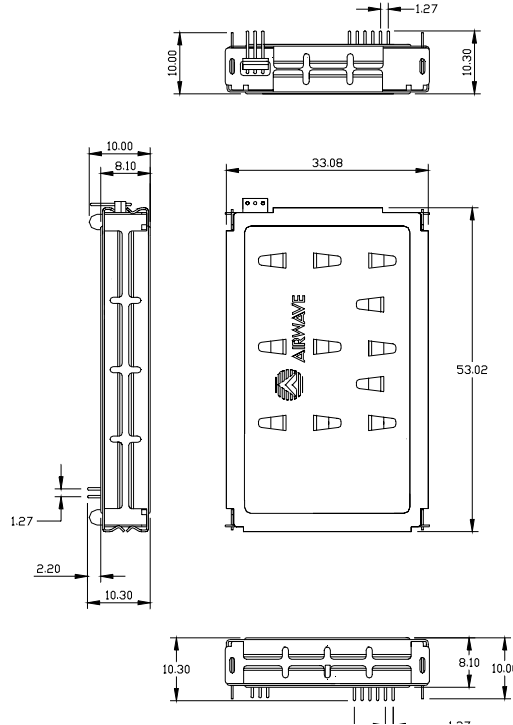
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## PHYSICAL DIMENTIONS

Unit: mm



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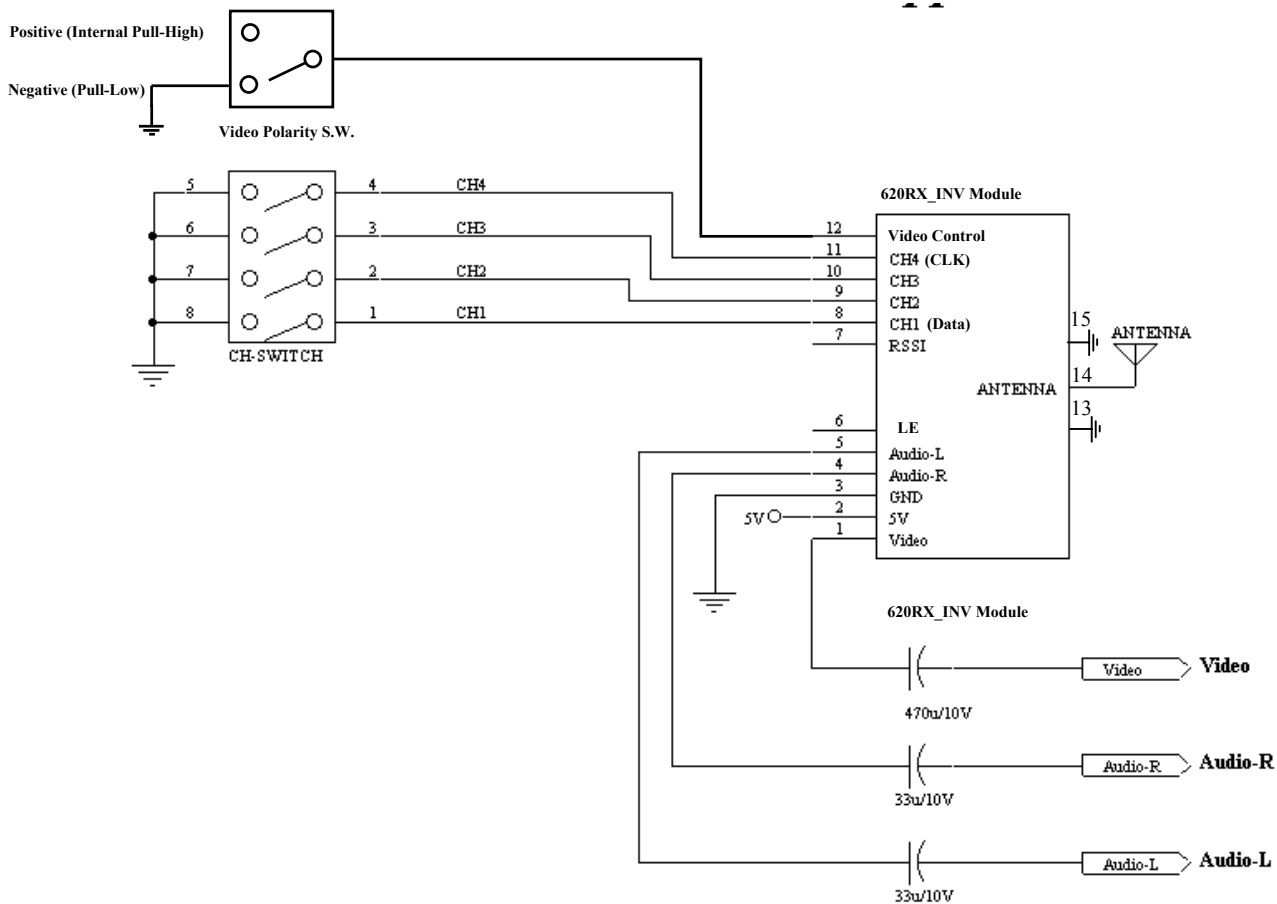


# AWM620RX-INV

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## AWM620RX-INV Module Application Circuit



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