

2.4GHz DSSS SPI Radio with Integrated Print Antenna

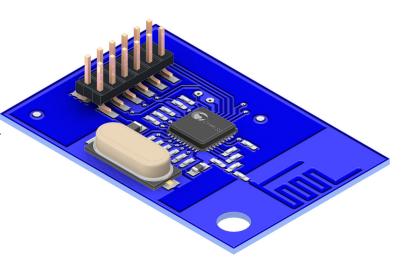
AWP24S Product Brief

Features

- The AWP24S is a 2.4-GHz Direct Sequence Spread Spectrum (DSSS) complete radio module which includes the Cypress radio integrated circuit WirelessUSB™ LP CYRF6936, integrated PCB Trace Antenna, and all external components
- Operates in the unlicensed worldwide Industrial, Scientific and Medical (ISM) band (2.400 GHz–2.483 GHz)
- 21mA operating current (Transmit @ –5 dBm)
- Transmit power up to +4 dBm
- Receive sensitivity up to -97 dBm
- Sleep Current <1 μA
- Operating range of up to 50m or more.
- DSSS data rates up to 250 kbps, GFSK data rate of 1 Mbps
- Auto Transaction Sequencer (ATS) no micro controller intervention
- Framing, Length, CRC16, and Auto ACK
- Fast Startup and Fast Channel Changes
- Separate 16-byte Transmit and Receive FIFOs
- AutoRate[™] dynamic data rate reception
- · Receive Signal Strength Indication (RSSI)
- 4-MHz SPI microcontroller interface
- Serial Peripheral Interface (SPI) control while in sleep mode
- Vertical or horizontal mounting
- No proprietary software required
- Size: 38.1 mm x25.4 mm (1.5" x 1.0")
- Weight: 27 grams
- FCC Modular Approval Grant to meet FCC Part 15, EN 300 328-1, EN 301 489-1, EN 301 489-7 and Industry Canada RSS-210 standards
- An FCC Module Approval (MA) Grant provides customers significant cost savings, by allowing customers to adopt the AWP24S FCC ID into their own products

Applications

- PC Human Interface Devices (HID)
- White Goods (Smart Appliances)
- Consumer
- Building/Home Automation
- Industrial Control
- Transportation



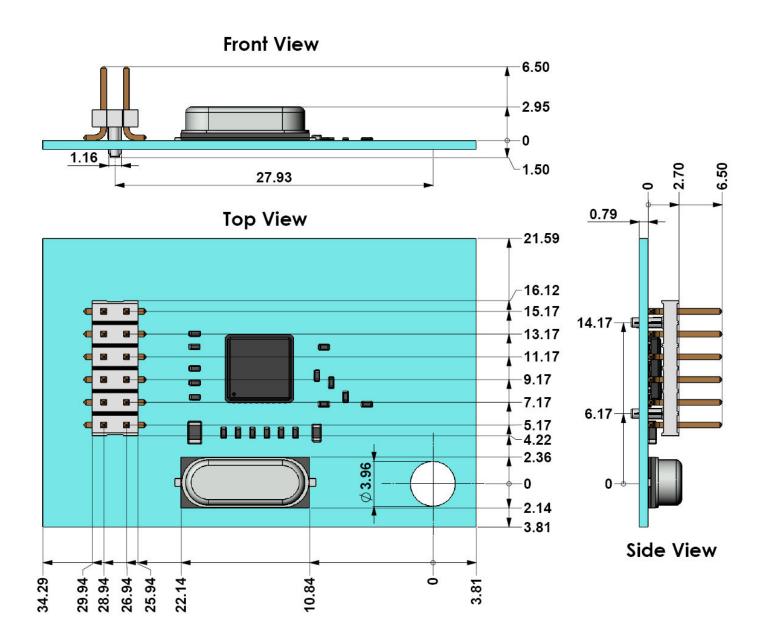
Operating Conditions

| • | V _{CC} | 2.4V to 3.6V |
|---|---|----------------|
| • | T _A (Ambient Temperature under Bias) | 0°C to +70°C |
| • | Ground Voltage | 0V |
| • | F _{OSC} (Crystal Frequency) | 12 MHz ±30 ppm |





Mechanical Diagram (Dimensions in mm)



Ordering Information

| Part Number | Description | Temperature |
|---------------|--|-------------|
| AWP24S-12H2-C | Integrated Print Antenna with Open 12 Pin Header in Commercial Temperature | 0 to 70°C |