

Overview

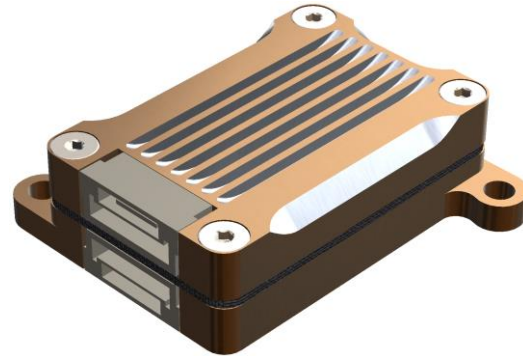
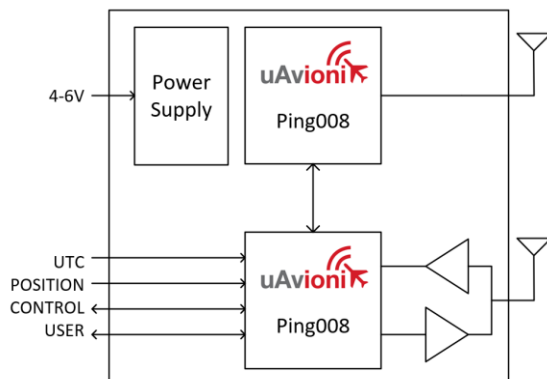
MicroLink is an aviation grade, miniature, 2X2 Multiple-Input and Multiple-Output (MIMO) data link radio specifically designed for long range, robust, Unmanned Aircraft Systems (UAS) telemetry data links. Ideal for size, weight, power and performance sensitive applications, MicroLink operates in the 902-928MHz license free ISM band.

Features

- 2X2 MIMO radio architecture for true diversity
 - Path (spatial) diversity
 - Frequency diversity
 - Polarization gain
- Dynamic Medium and Multiple access, time and position synchronized, to support 100s of simultaneous links
 - Adaptive time and frequency spreading
- Global Positioning System (GPS) Coordinated Universal Time (UTC) link synchronization
- Dual Ping008 L-Band radio SOCs
- MMCX dual antenna connectors
- Status, integrity and health monitoring
- Environmental RTCA/DO-160G
- Software RTCA/DO-178C Level C
- Complex Hardware RTCA/DO-254 Level C

Regulatory

- FCC 47 CFR Part 15.247 ID 2AFFTC2XISM



Technical Specifications

Specification	Value
Input Power	4-6V 1.7W Peak
Size	31x26x9mm
Weight	16 grams
Operating Temp	-45 to 70°C
Radio	
Band	902-928MHz ISM Band
Architecture	2x2 MIMO
Transmit Power	1W (4W EIRP)
Spreading	Code and Frequency
Bandwidth	200kHz
Receiver Sensitivity	
User Receiver	-118dBm
Control Receiver	-121dBm
Doppler Capture Range	±16kHz
Interfaces	
User	
Data rate	57600bps
Protocol	Binary, Transparent
Control	
Data rate	115200bps
Protocol	GDL90+
Timing/Position	
UTC	1PPS Time Pulse
Position	UBX / NMEA 0183 115200bps
Environmental	
DO-160G	Temperature Cat B2

Electrical Specification

User Interface

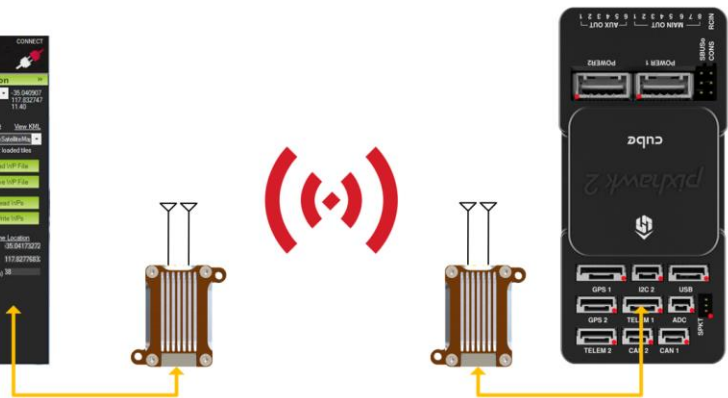
Pin	Type	Physical	Port
1	5V	5V	
2	RXD	IN	Telem
3	TXD	OUT	Telem
4	RXD	IN	GPS
5	PPS	IN	1PPS
6	GND		

Timing/Position, Control Interface

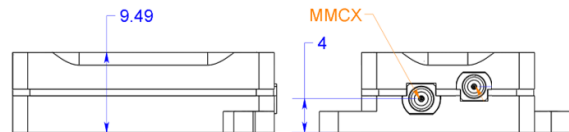
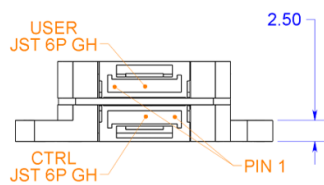
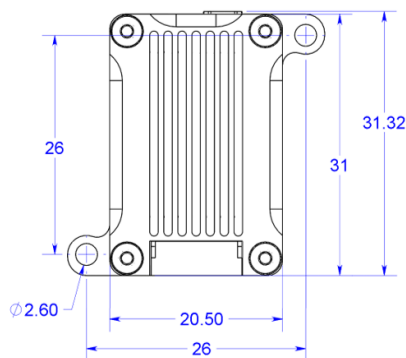
Pin	Type	Physical	Port
1	5V	5V	
2	RXD	IN	GPS
3	UTC	IN	1PPS
4	RXD	IN	Control
5	TXD	OUT	Control
6	GND		

Mating Connectors: JST GHR-06V-S

Typical Configuration



Mechanical Specification



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