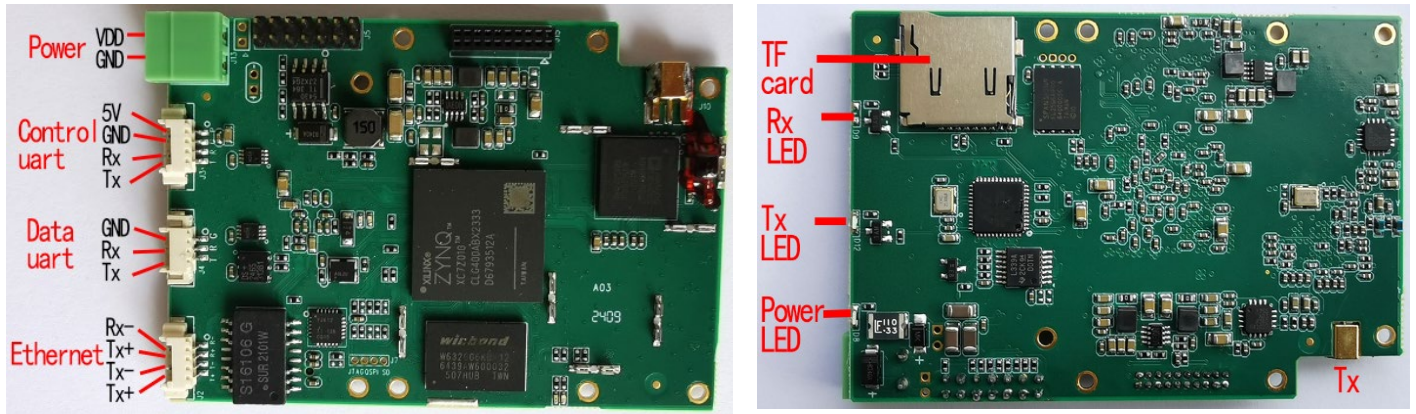


SEB1 Ethernet COFDM Module



SEB1 Ethernet COFDM module accepts data from Ethernet port and transmits out. It can pair with SHD1&DR2C (or SHD4&DR2C, SEB1&DR2C) to implement one-way Ethernet/uart UDP data COFDM wireless transmission.

- COFDM modulation;
- Stable signal transfer in NLOS and high speed moving;
- Adjustable working frequency, band width, transmission power, etc;
- Ethernet/uart connection for IP data UDP broadcast transmission
- Maximum 31.67Mbps wireless transmitting bitrates
- Embedded RTSP video client to get video from IP camera via Ethernet connection

Specification:

IO

RF output	MMCX female
TTL 3.3V control uart	4PIN PH1.25mm Connector
TTL 3.3V data uart	3PIN PH1.25mm Connector
Power in	2PIN PH2.54mm phenix Connector
Ethernet port	4PIN PH1.25mm Connector
TF-card	For firmware update
Power led	Red constant light when device is normal powered
Tx led	Green blinks on transmitting
Rx led	Green blinks on receiving

Modulation

Modulation Formats	COFDM(DVB-T)
Carriers	2K
Bandwidth	Configurable from 1MHz to 8MHz, step by 1KHz
FEC	1/2, 2/3, 3/4, 5/6, 7/8
Guard interval	1/32, 1/16, 1/8, 1/4
Constellation	QPSK, 16QAM, 64QAM

RF Transmitted

Frequency Bands	70MHz~4GHz
Tuning Step size	1KHz
Transmission power	Configurable, maximum -5dBm(subject to frequency)

Monitoring and control

Comprehensive setup with Sihid Config Panel or other device via control uart.

Temperature range

Full specification: -40° to +70°C Ambient
Storage: -40° to +85°C

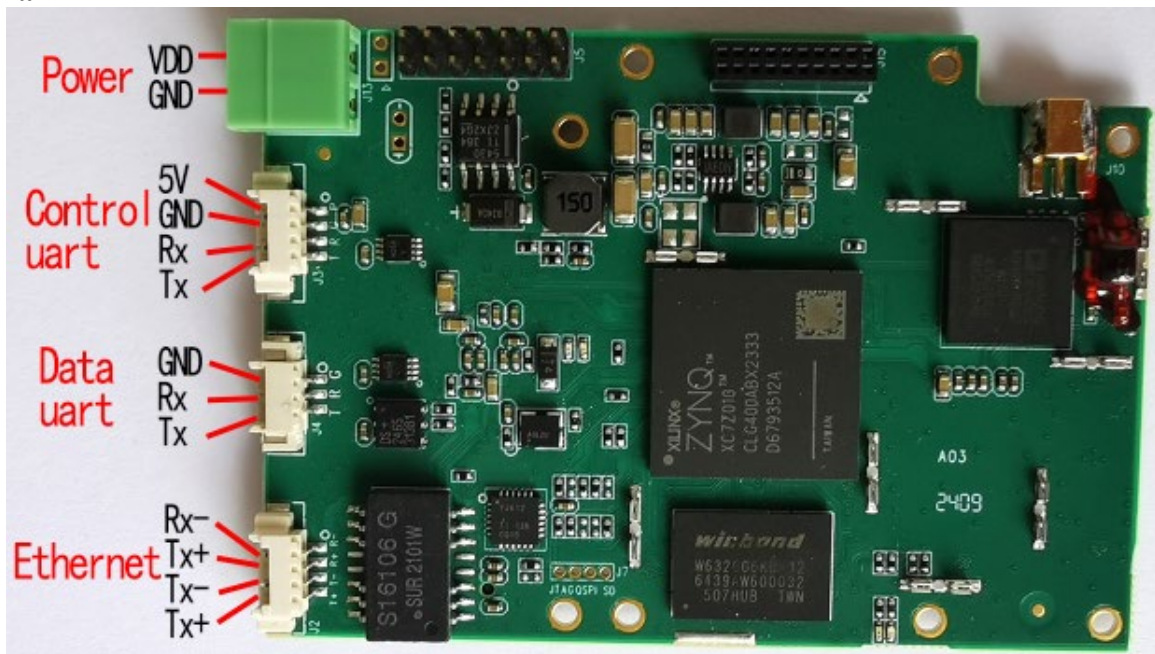
Dimensions

73x51x11mm (not including connectors out of the board)

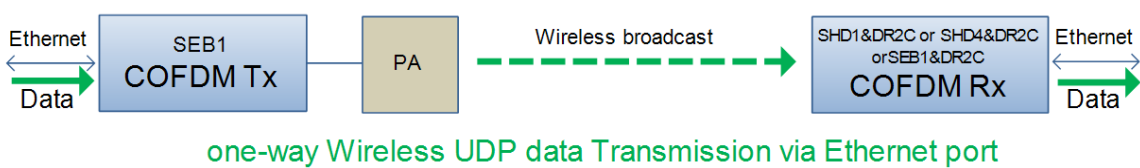
Power requirements

Input range: 7~24VDC
Power consumption: <250mA@12V

I/O Signal



One-way Ethernet UDP transmission paired with COFDM receiver module

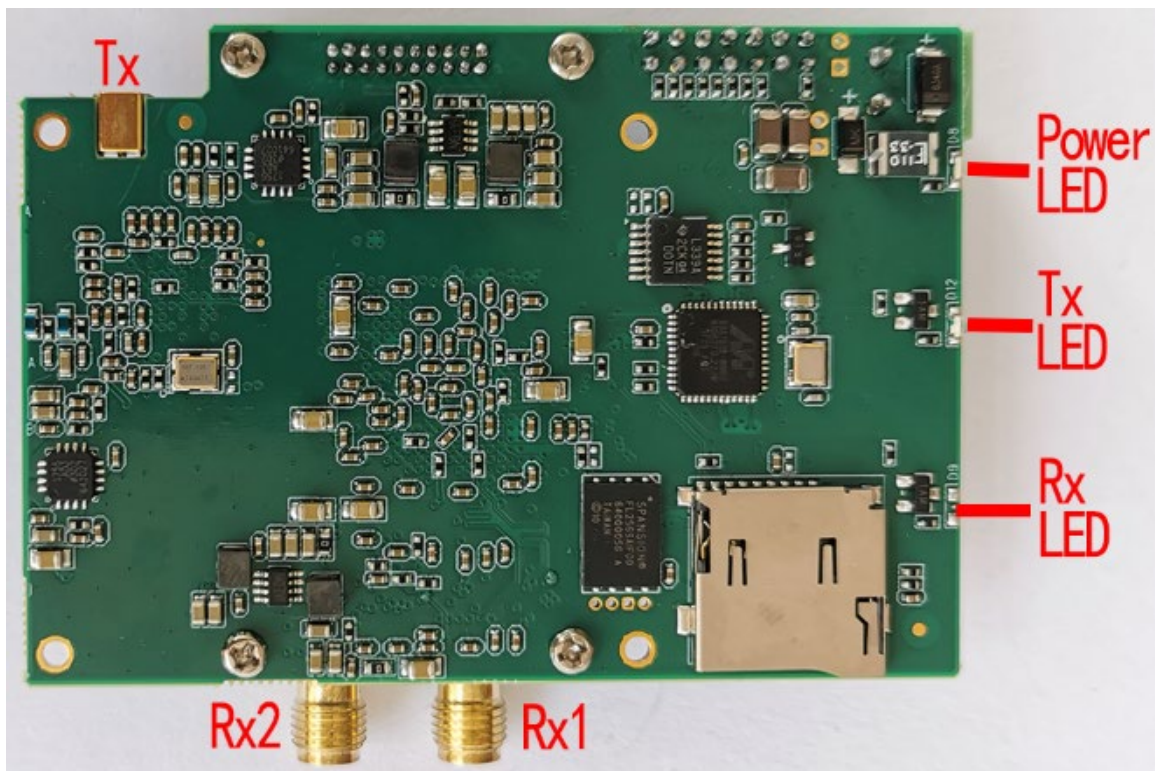
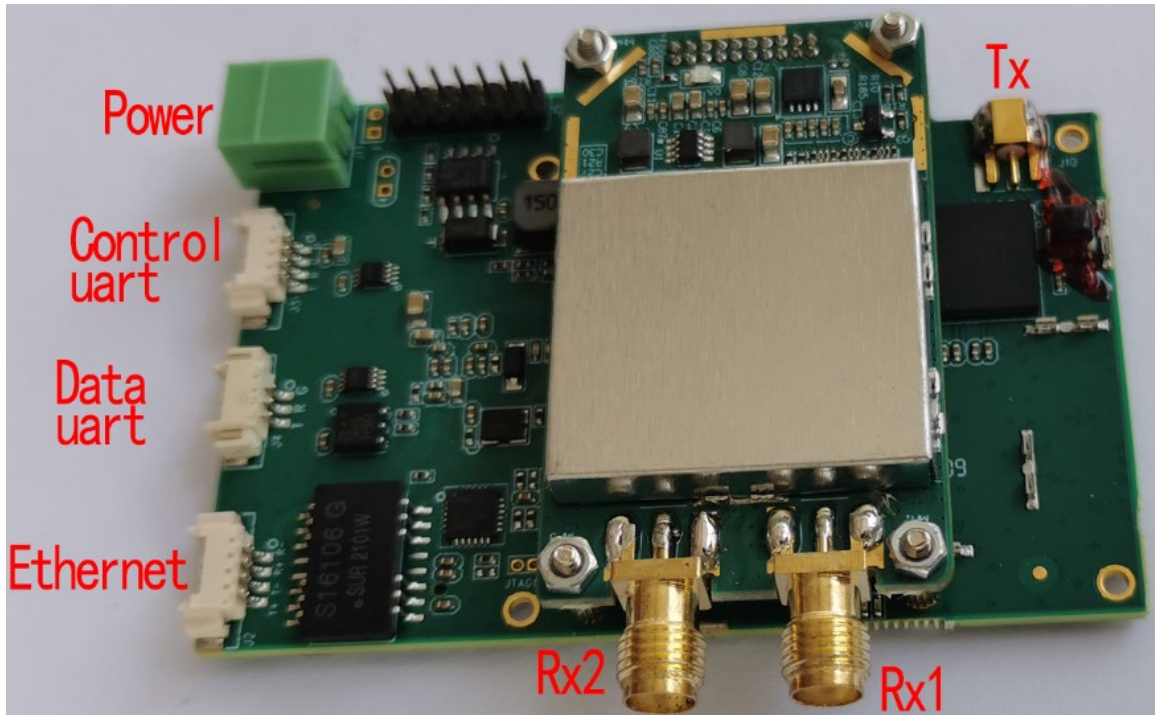


IP camera video Transmission



SEB1 can get video from IP camera via Ethernet connection with built-in RTSP client and transmit out, on the COFDM receiving side, our COFDM module has built-in RTSP Server to enable video streaming over Ethernet for remote software or hardware decoders.

SEB1&DR2C module



SEB1&DR2C can work as COFDM relay module or COFDM receiving module with Ethernet output, we have different firmware for it.

SEB1&DR2C works as relay module:

Demodulation and Modulation

Modulation Formats	COFDM(DVB-T)
Carriers	2K
Bandwidth	Configurable from 1MHz to 8MHz, step by 1KHz
FEC	1/2, 2/3, 3/4, 5/6, 7/8

Guard interval	1/32, 1/16, 1/8, 1/4
Constellation	QPSK, 16QAM, 64QAM

RF Received

Frequency Bands	160MHz~860MHz
Tuning Step size	1KHz
Sensitivity	-97 ± 1dBm(BW=8MHz, QPSK, CR=2/3, GI=1/16) for one channel and add 3dBm for two channel

RF Transmitted

Frequency Bands	70MHz~4GHz
Tuning Step size	1KHz
Transmission power	Configurable, maximum -5dBm(subject to frequency)