

AHPI7292S is the world's first WiFi HaLow™ Raspberry Pi™ HAT module

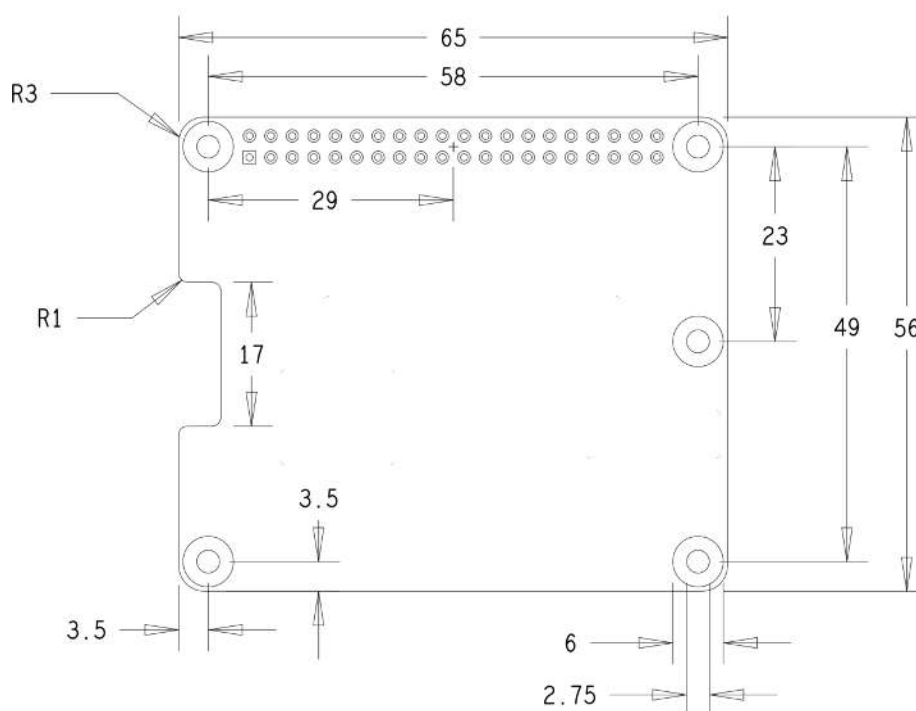
The AHPI7292S module series allows building long range, ultra-low power WiFi networks in sub 1 GHz license-exempt bands, utilizing the very popular and open platform - the Raspberry Pi™. WiFi HaLow™ enables connectivity for many applications, including sensors and wearables.

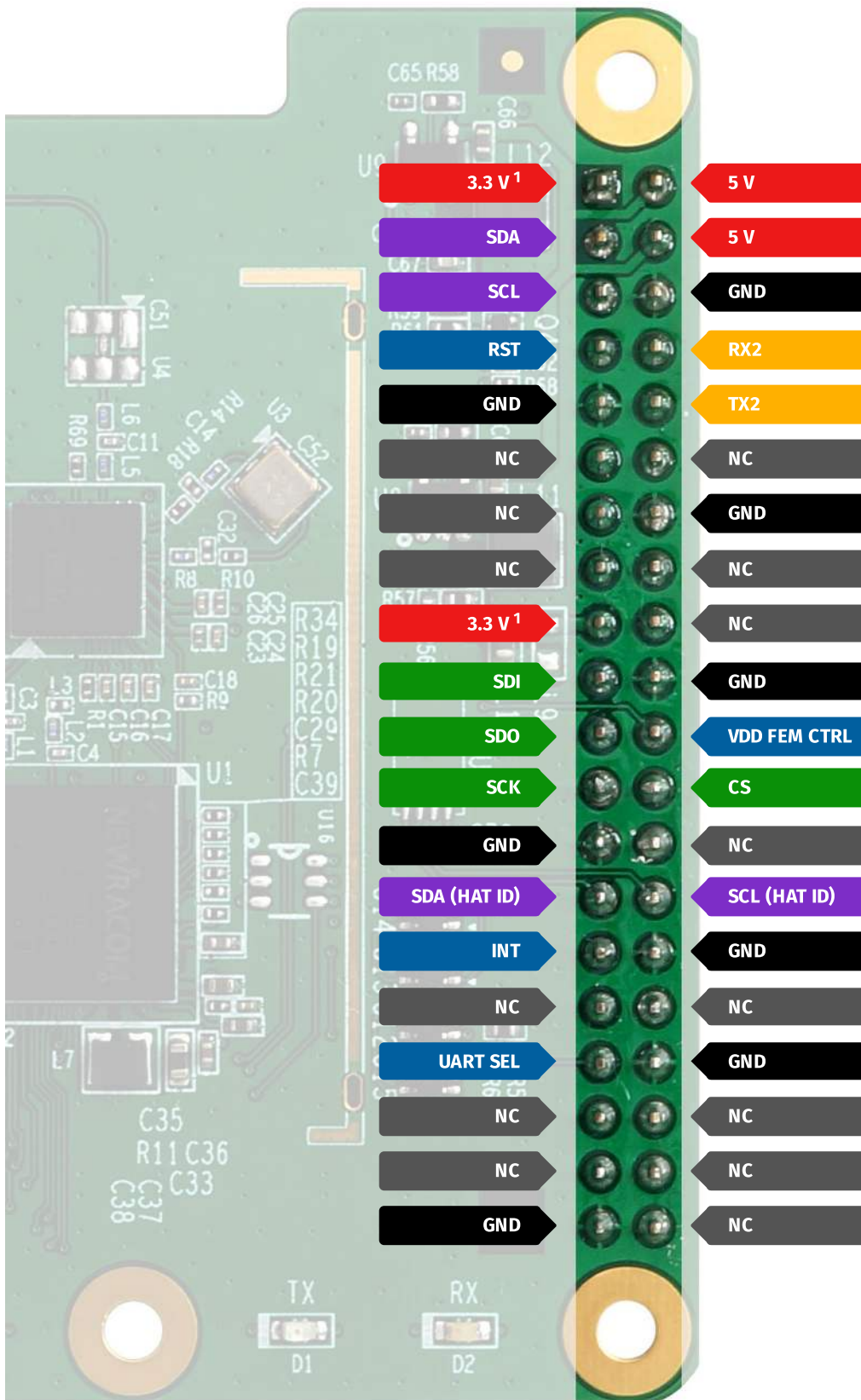
With support for standalone and host based modes, up to 15 Mbps data throughput and complete SDK, getting started with this new WiFi standard will be straightforward.

Key features

- 1 Newracom™ NRC7292 WiFi HaLow™ SOC (IEEE 802.11ah draft 8.0 compliant)
- 2 Qorvo™ RFFM6901 front-end
- 3 IPEX/U.FL antenna connector (female SMA in AHPI7292SA model)
- 4 Switch for NRC7292 mode selection
- 5 4-pin UART header (2.54 mm pitch)
- 6 Raspberry Pi™ HAT form factor with 40-pin GPIO connector
- 7 3x LED

Chipset	Newracom™ NRC7292	
Frequency	847 MHz (TW) 866 MHz (EU) 915 MHz (US)	922 MHz (KR) 924 MHz (JP)
Modulation	OFDM with BPSK, QPSK, 16QAM, 64QAM	
Data rate	150 Kbps ~ 15 Mbps	
Channel bandwidth	1/2/4 MHz	
Antenna connector	IPEX/U.FL (AHPI7292S) or female SMA (AHPI7292SA)	
Interfaces	SPI, UART and I ² C	
LED	1× power, 1× TX, 1× RX	
Form factor	Raspberry Pi™ HAT	
Dimensions	65 × 56 × 10.3 mm	
Software	https://github.com/newracom/	





1) 3.3 V pins are reserved for future use in designs based on 3.3 V power supply (current module design is based on 5 V power supply)

