

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

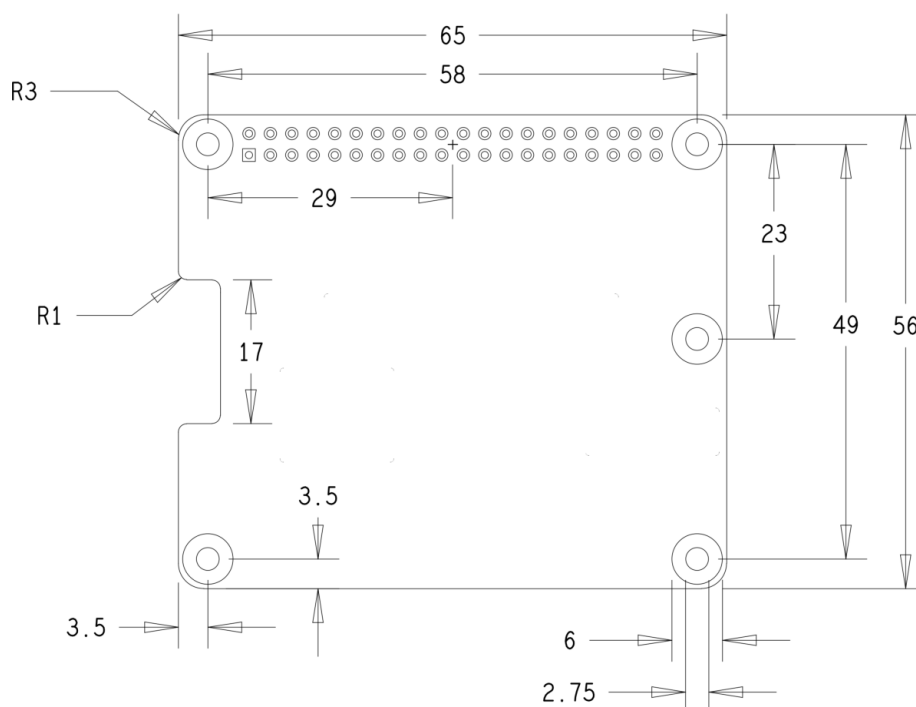
The AHPI7292S module series allows building long range, ultra-low power WiFi networks in sub 1 GHz license-exempt bands, utilizing the very popular and open platform - the Raspberry Pi™. WiFi HaLow™ enables connectivity for many applications, including sensors and wearables.

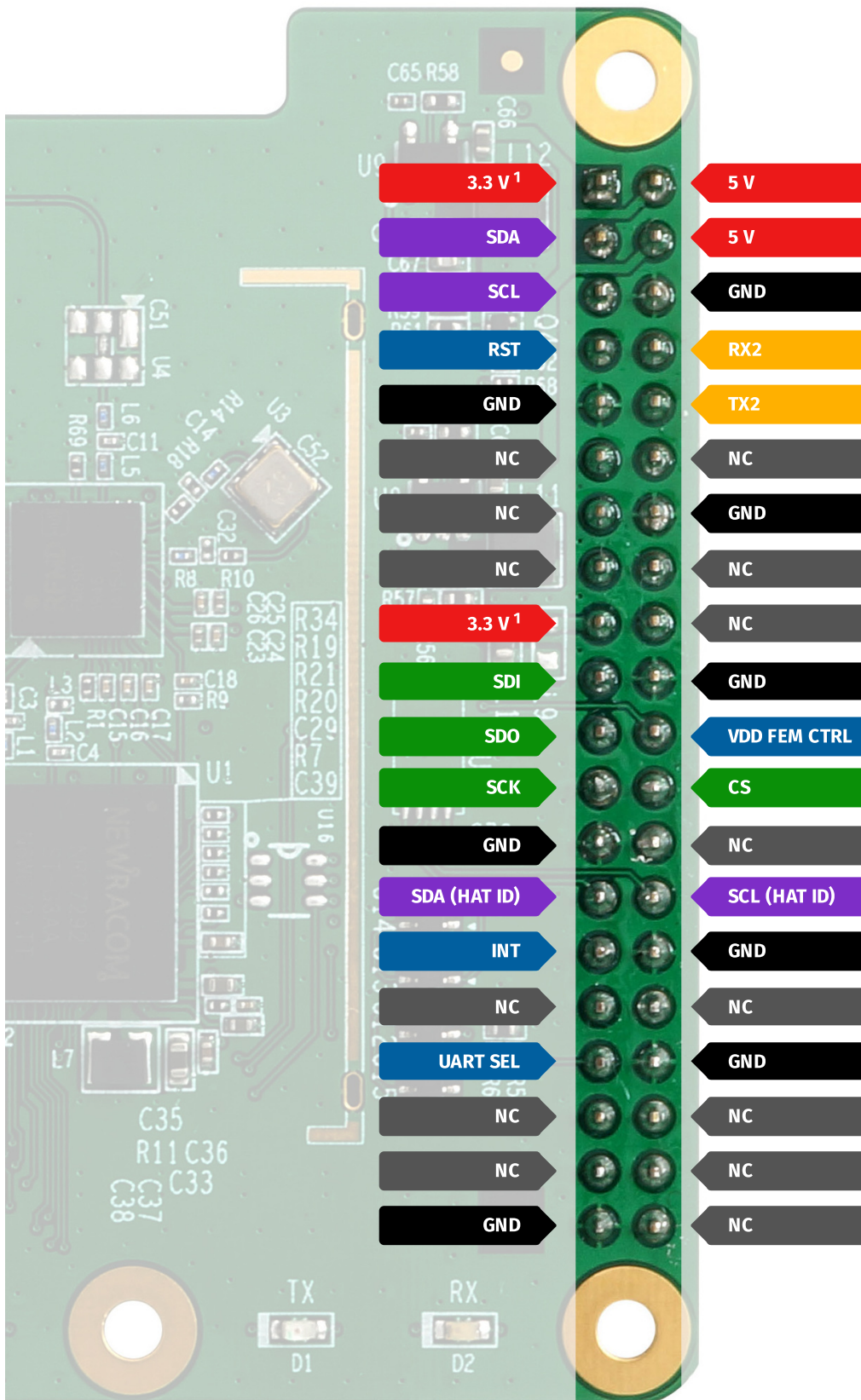
With support for standalone and host based modes, up to 15 Mbps data throughput and complete SDK, getting started with this new WiFi standard will be straightforward.

## 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

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





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)



