

- Operation description

The core functionality of the AV6302 is identical to that of the AV6301 and it integrates all of the same functions. To minimize external Bill of Materials (BOM) for a complete headset client the AV6302 integrates additional analog functions. SPI and TWI interfaces are retained as well as a full USB transceiver. Enumeration as a high current device during charging as well as simplified field update of firmware on the Headset is enabled.

A complete battery charging system is added to the significant power management functions already on chip. The battery charger includes a temperature monitor and is compliant with Lithium Ion and Lithium polymer battery types.

An Integrated high quality audio CODEC directly drives on-chip low impedance headphone amplifiers and interfaces to electret and condenser microphone transducers. On-chip audio DSP, for both the stereo forward audio path and mono microphone path, performs fully programmable functions including gain control, equalization and compression, providing the headset designer with the essential tools to create custom voicing across Headset models or applications.

18 General purpose I/O ports are available, including support for LEDs and Encoders. In addition, a 3 channel general purpose ADC is provided that can support up to 2 potentiometers.

A unique feature of the AV6302 Client chip is its ability to accept I2S input in addition to Microphone input for advanced routing of Chat and Microphone signals. Advanced audio routing options include the ability to utilize the microphone preamp, gain control and DSP before outputting the signal to an I2S out. This is a key feature when interfacing to XBOX controller radios.

Operation Frequency	2403.35 MHz ~ 2477.35 MHz	
Modulation Type	Pi/4-DQPSK	
Antenna Information	Antenna Type:PCB	Maximum Peak Gain: ANT A:5.48dBi ANT B:2.08dBi
	Note:The two sets of antennas do not work simultaneously	
Crystal	16MHz	

Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2403.35	21	2443.35
2	2405.35	22	2445.35
3	2407.35	23	2447.35
4	2409.35	24	2449.35
5	2411.35	25	2451.35
6	2413.35	26	2453.35
7	2415.35	27	2455.35
8	2417.35	28	2457.35
9	2419.35	29	2459.35
10	2421.35	30	2461.35
11	2423.35	31	2463.35
12	2425.35	32	2465.35
13	2427.35	33	2467.35
14	2429.35	34	2469.35
15	2431.35	35	2471.35
16	2433.35	36	2473.35
17	2435.35	37	2475.35
18	2437.35	38	2477.35
19	2439.35		
20	2441.35		