

I believe the details in the table below are accurate, but I am not 100% sure. There are some holes where I could not find the applicable info for certain boards. I tried my best to use reputable sources (datasheets, etc.) for the info in the table, but some comes from retailer sites with translations from Chinese. If you see errors in the table or have info that will fill a gap, please let me know and I will update the table appropriately.

		Video Inputs (Resolution/Hz/bit depth)						
<u>Controller Board</u>	<u>Input Voltage</u>	<u>HDMI Ports (Protocol)</u>	<u>DisplayPorts (Protocol)</u>	<u>USB C (PD Watts)</u>	<u>Audio Amps</u>	<u>Driver Chip</u>	<u>Chip Maker</u>	<u>USB-A / B Ports (Version)</u>
R1811 V.4	24 Vdc	2 (2.1)(5K/60/10)	2 (1.4) (5K/60/10)	Y (65W) (5K/60/10)	10 W	RTD2718Q	RealTek	2 / 0 (2.0)
R1811 V.3	24 Vdc	2 (2.0) (5K/60/8)	2 (1.4) (5K/60/10)	Y (65W) (5K/60/10)	10 W	RTD2718Q	RealTek	2 / 0 (2.0)
R9A18 V1 (Note 4)	12 Vdc	2 (2.0) (5K/60/8)	2 (1.2) (5K/60/10)	None	10 W	RTD2718Q	RealTek	None
R9A18 V1.1 (Note 4)	12 Vdc	2 (2.0) (5K/60/8)	2 (1.4) (5K/60/10)	None	10 W	RTD2718Q	RealTek	None
JRY-W9CUHD-AA1	12/24 Vdc	1 (2.0) (5K/30/8)	1 (1.4) (5K/60/8)	Y (65W) (5K/60/8)	2 W	MT9801V	MediaTek	2 / 1 (2.0)
JRY-W9RQUHD-FA1	12/24 Vdc	2 (2.0) (5K/60/8)	2 (1.4) (5K/60/10)	None	3 W	MT9801V	MediaTek	None
JRY-W9RQUHD-SA1	24 Vdc	2 (2.1) (5K/60/8)	1 (1.4) (5K/60/10)	Y (90W) (5K/60/10)	3 W	MT9801V	MediaTek	2 / 1 (3.0)
Haijing T18	12/24 Vdc	2 (2.0) (5K/60/8)	1 (1.4) (5K/60/10)	Y (65W) (5K/60/10)	5 W	RTD2718Q	RealTek	2 / 1
Haijing T19	12/24 Vdc	2 (2.1) (5K/60/8)	2 (1.4) (5K/60/10)	None	5 W	RTD2718QD	RealTek	None
OPDU49-4K-D7	12/24 Vdc	3 (2.0) (5K/60/8)	1 (1.4) (5K/60/8)	Y (65W) (5K/60/8)	8 W	MT9 series	MediaTek	1 (2.0)

**General Notes:**

- Power delivery via USB C requires 24 Vdc power supply
- Host computer's GPU must support 5K resolution to obtain 5K on the display (every Apple silicon Mac is capable of this for at least one display)
- USB C connection will provide 5K resolution using a single cable, but you must ensure you have a proper cable (search for "8K cable" in this thread for additional info)
- 10 bit color depth via DisplayPort requires using two DP cables (see post #1409 for one potential solution). Single DP cable gives 8 bit color depth.
- A 30 Hz refresh rate is generally not recommended due to choppiness of items in motion on the display (e.g., viewing videos)
- HDMI 2.0 can only achieve 60 Hz refresh rate at 5K resolution using compression technology (e.g., Display Stream Compression, or DSC) and requires proper cables. The JRY--AA1 board appears to be limited to 30 Hz for 5K resolution over HDMI 2.0
- All the boards will support higher refresh rates at lower resolutions (i.e., 4K or less). I did not include those details in the table as I wanted limit it to a comparison of board performance at 5K resolution only.
- The details in the table reflect performance/capabilities when using MacOS. Windows or other operating systems may yield different results.