

# PI-SG565D single-board computer features & interfaces

Features		Interfaces	
CPU	QCS6490, octa-core SoC 1 × A78 @ 2.7 GHz + 3 × A78 @ 2.4 GHz + 4 × A55 @ 1.9 GHz	LCM	<ul style="list-style-type: none"> <li>• 1 × USB Type-C interface (DP Over USB Type-C), DisplayPort 1.4, with up to 4K (3840 × 2160) @ 60 fps</li> <li>• 1 × Micro HDMI interface <sup>②</sup>, HDMI 2.0 (the frame rate is to be determined*); decoder: 4K (H.264/ H.265/ VP9) @ 60 fps</li> <li>• 1 × FPC connector <sup>②</sup>, 4-lane MIPI DSI D-PHY 1.2; 1280 × 800 @ 60 fps</li> </ul>
GPU	Adreno™ 643L @ 812 MHz	Camera	2 × 4-lane MIPI CSIs, with up to 2.5 Gbps/ lane data rate
Video	Encoder: 4K (H.264/ H.265) @ 30 fps Decoder: 4K (H.264/ H.265/ VP9) @ 60 fps	Touch Panel	Supported
Memory	8 GB LPDDR4x + 128 GB UFS	Audio	<ul style="list-style-type: none"> <li>• 1 × 3.5 mm earphone jack</li> <li>• 1 × DMIC</li> <li>• 1 × Micro HDMI audio out</li> <li>• 1 × loudspeaker</li> </ul>
OS	Yocto Linux/ Debian*	PCIe	1 × 1-lane PCIe 3.0, with up to 8 Gbps data rate
Wi-Fi	2.4 & 5 GHz, 802.11a/ b/ g/ n/ ac, Wi-Fi 5	USB	<ul style="list-style-type: none"> <li>• 1 × USB 3.1 Type-C interface, back compatible with USB 2.0, with up to 5 Gbps data rate</li> <li>• 2 × standard USB 2.0 Type-A interfaces, with host mode only, and up to 480 Mbps data rate</li> <li>• 1 × USB Type-C interface for the main power supply</li> </ul>
Bluetooth <sup>①</sup>	Bluetooth 5.0	Ethernet	1 × standard RJ45 interface for Gigabit Ethernet (10/ 100/ 1000 Mbps) connectivity
Certification	CCC*/ CE*	UART	5 × UARTs (multiplexing interfaces included), among which Debug UART is only for debugging
		SD Card	1 × SD 3.0, 4-bit SDIO
		I2C/ LED/ SPI/ PWM/ GPIO/ PWRKEY	Supported
		Antenna	PCB antenna

\*: Under development/ in progress    <sup>①</sup>: The product supports only mandatory Bluetooth 5.0 features but not optional features such as the 2 Mbps BLE and Advanced Advertising Extensions

<sup>②</sup>: The Micro HDMI and MIPI display interfaces are mutually exclusive and cannot be used simultaneously

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