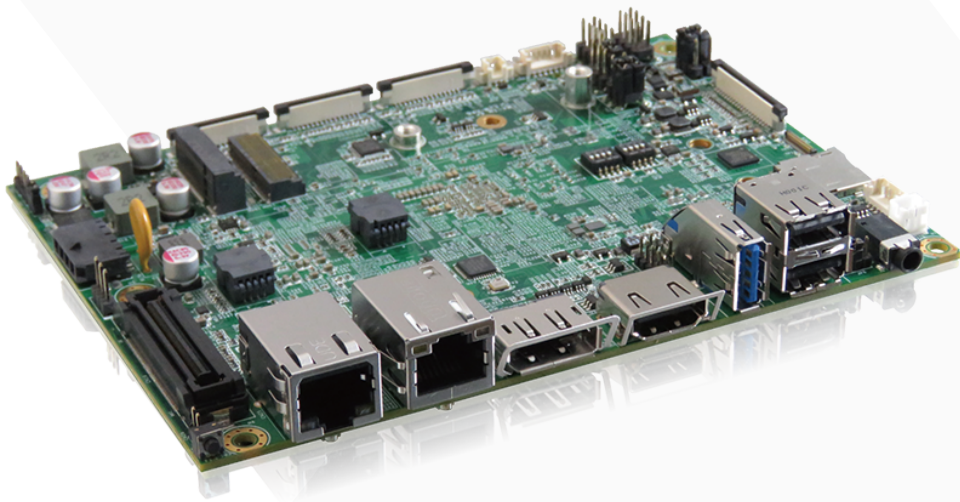


3.5"-SBC-i1200



3.5" Single Board Computer with MediaTek® MT8395 (Genio 1200) Processor

- ▶ High-performance ARM® Cortex®-A78 + low-power Cortex®-A55 big.LITTLE configuration
- ▶ Dual-core AI Processor Unit (API) + 3x CSI camera interface for edge AI applications
- ▶ Soldered memory and storage for shock and vibration resistant applications
- ▶ Additional Rear I/O expansion via board-to-board connector
- ▶ Industrial-grade operating temperature range for extreme environmental conditions

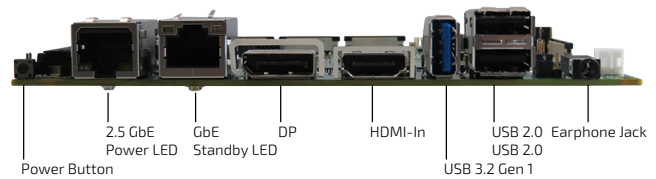
3.5" Single Board Computer with MediaTek® MT8395 (Genio 1200) Processor

3.5"-SBC-i1200 is a 3.5" single board computer powered by MediaTek® MT8395 (Genio 1200) SoC based on quad-core ARM® Cortex®-A78 + quad-core Cortex®-A55 configuration as well as ARM® Mali-G57 MP5 integrated GPU. In addition to multiple display

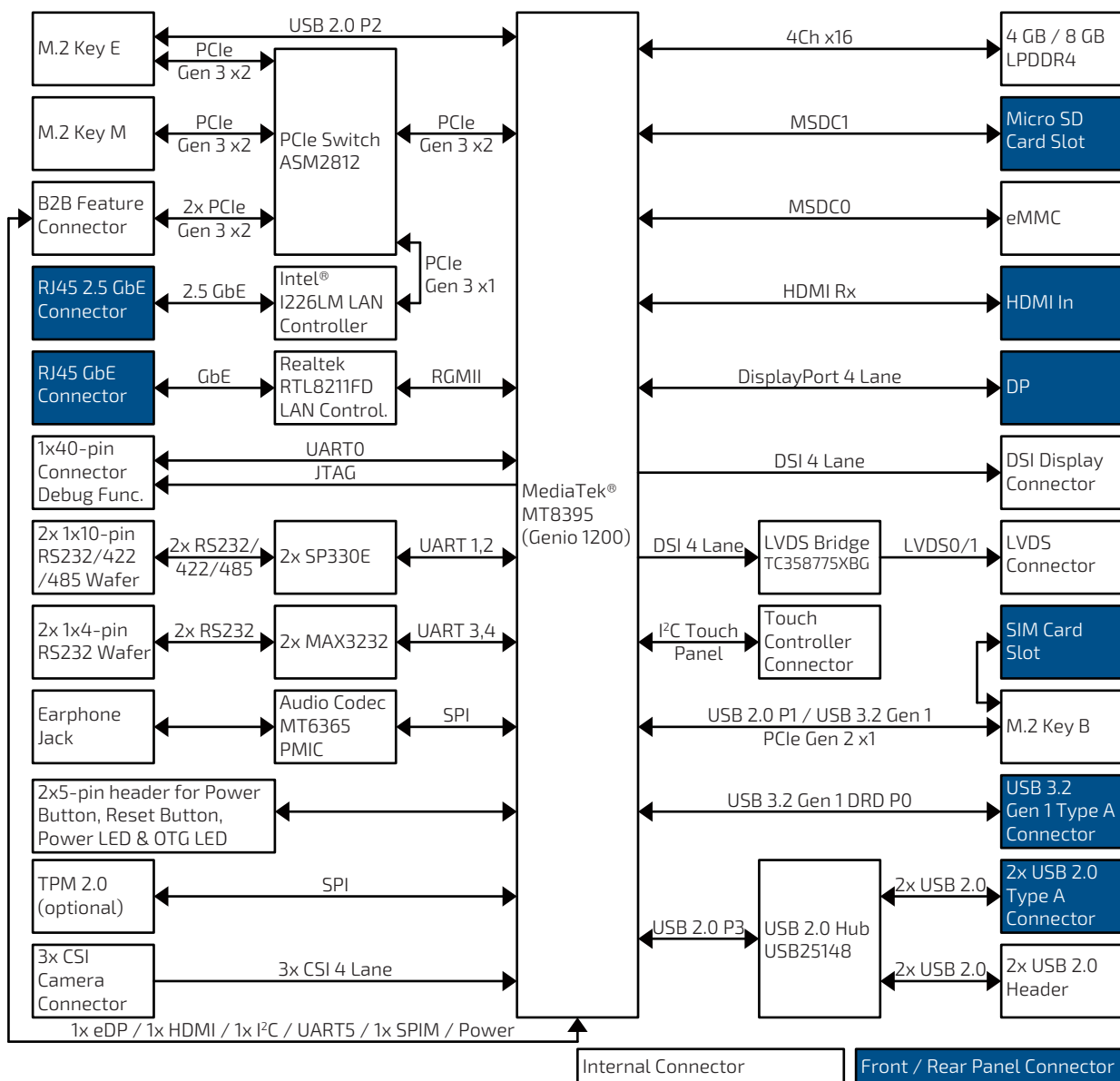
output options, the board supports three camera inputs via CSI interfaces as well. It can deliver best-in-class graphics performance and AI capabilities, ideal for edge computing and edge AI applications.

- MediaTek® MT8395 (Genio 1200) SoC
- 4 GByte / 8 GByte LPDDR4X memory down
- 1x DP, 1x DSI, 1x LVDS for display output
- 1x HDMI-In for display input
- 3x CSI for camera input
- 1x 2.5 GbE LAN, 1x GbE LAN for Ethernet
- 1x USB 3.2 Gen 1, 4x USB 2.0 for USB device connection
- 2x RS232/422/485, 2x RS232, 1x UART for serial connection
- 8x DIO for device / signal control
- 1x I2C for touch control
- 32 GByte eMMC, 1x Micro SD Slot, 1x M.2 Key M for storage

- 1x M.2 Key B for SSD, WWAN or other possible expansion
- 1x M.2 Key E for WLAN, Bluetooth or other expansion
- 1x Board-to-board connector for additional rear I/Os
- TPM 2.0 support (optional)
- Extreme temperature model available: -40 °C ~ 85 °C



Block Diagram



Technical Information

SYSTEM	PROCESSOR MEMORY	MediaTek® MT8395 (Genio 1200) (4C ARM® Cortex®-A78 @ 2.2 GHz + 4C Cortex®-A55 @ 2.0 GHz, 3.1 WTDP) 4 GByte / 8 GByte LPDDR4X
VIDEO	GRAPHICS DISPLAY OUTPUT INTERFACE DISPLAY INPUT INTERFACE CAMERA INTERFACE	ARM® Mali-G57 MP5 1x DP (on front) 1x DSI (by wafer) 1x LVDS (24-bit, 2-ch) 1x HDMI-In (on front) 3x CSI (by wafer)
AUDIO	AUDIO CODEC AUDIO INTERFACE	MT6365 PMIC includes Audio Codec 1x Earphone Jack (CTIA, on front)
NETWORK CONNECTION	ETHERNET	1x 2.5 GbE LAN (RJ45 on front, Intel® I226IT) 1x GbE LAN (RJ45 on front, Realtek RTL8211FD)
PERIPHERAL CONNECTION	USB SERIAL PORT OTHER I/Os	1x USB 3.2 Gen 1 (Type A on front) 4x USB 2.0 (2x Type A on front, 2x by header) 2x RS232/422/485 (by header) 2x RS232 (by header) 1x UART (by header, debug support) 8x DIO (by wafer) 1x I²C (for touch control)
STORAGE & EXPANSION	eMMC MICRO SD CARD SLOT M.2 SIM CARD HOLDER BOARD-TO-BOARD CONNECTOR	32 GByte eMMC 1x Micro SD Card Slot (on rear) 1x M.2 Key B (2242 / 2260 / 2280, w/ USB 2.0 / USB 3.2 / PCIe x1 optl. / UIM) 1x M.2 Key E (Type 2230, w/ USB 2.0 / PCIe x1) 1x M.2 Key M (Type 2280, w/ PCIe x2) 1x SIM Card Holder (Micro type) 1x eDP 1x HDMI 1x PCIe x2 1x I²C 1x UART 1x SPIM
POWER	INPUT VOLTAGE CONNECTOR	DC 12 V 1x4-pin pitch 3.0 mm Wafer
FIRMWARE	WATCHDOG REAL TIME CLOCK SECURITY	Programmable WDT integrated in processor to generate system reset event Processor integrated RTC TPM 2.0 Support (Infineon SLB 9670, optional)
SYSTEM CONTROL & MONITORING	BUTTON, SWITCH & INDICATOR FP HEADER	1x Power Button (on front) 1x Power LED (Green, on front) 1x Standby LED (Yellow, on front) 1x Header for Power Button, Reset Button, Power LED & OTG LED 1x Header for M.2 Key B activity LED 1x Header for M.2 Key E activity LED 1x Header for M.2 Key M activity LED
COOLING	COOLING METHOD	Passive
MECHANICAL	DIMENSION (L x W)	ECX (146 mm x 105 mm / 5.75" x 4.13")
ENVIRONMENTAL	OPERATING TEMPERATURE STORAGE TEMPERATURE HUMIDITY	0 °C ~ 60 °C / 32 °F ~ 140 °F (Standard) -40 °C ~ 85 °C / -40 °F ~ 185 °F (Extreme) -20 °C ~ 80 °C / -4 °F ~ 176 °F (Standard) -55 °C ~ 85 °C / -67 °F ~ 185 °F (Extreme) 0 % ~ 95 %
COMPLIANCE	EMC & SAFETY	CE Class B, FCC Class B

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