



Features

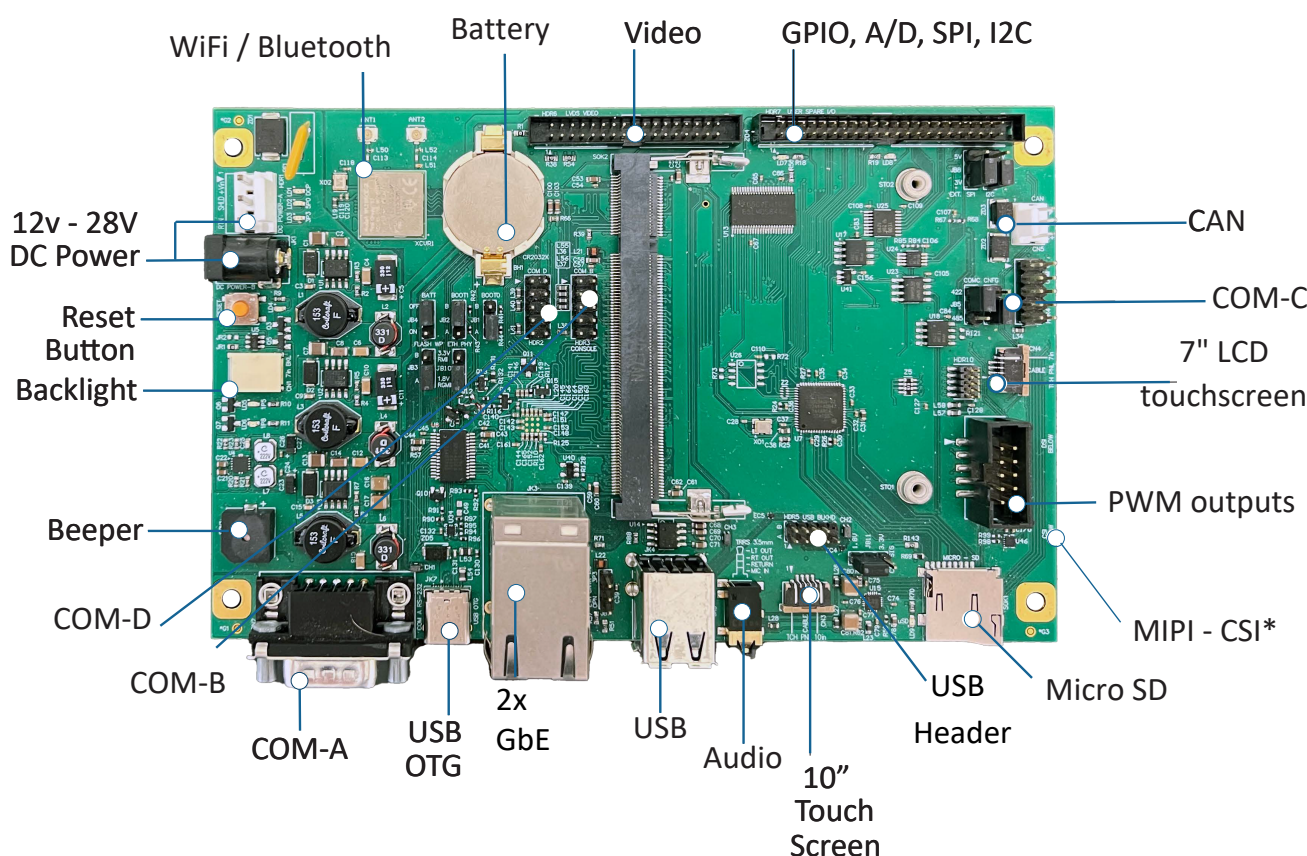
- Nuvoton Dual 800MHz ARM 64-bit Cortex A35
- Additional 180Mhz Cortex M4 RT coprocessor
- 4GB of eMMC Flash & 512MB of DDR3 RAM
- 7" (800 nits) WVGA LVDS LCD with Touchscreen
- 4x MIPI-CSI Lanes, 24-bit LVDS LCD Interface
- Dual Ethernet ports (1x 1GB & 1x 100 BaseT)
- 16x GPIO, 1x SPI, 1x I2C, 1x CAN-FD, 2xPWM
- 3x USB 2.0 Ports
- 4x Serial Ports (3x RS232/1x RS232/422/485)
- Inexpensive Open-Frame Design
- WiFi 802.11 a/b/g/n Bluetooth 5.1



Specifications

Processor	Nuvoton NuMicro® MA35D1 Dual 800MHz 64-bit ARM Cortex A35
	180MHz Cortex M4 RT coprocessor
Memory	512MB DDR3L SDRAM
	4GB eMMC Flash
	16MB of Serial Data Flash
	1x Micro-SD Flash Card Socket
I/O	16x GPIO, 4xA/D, 1xSPI, 2xPWM)
	1x I2S Audio port with Mono Microphone In/Stereo Line-Out
	1x 1000 BaseT & 1x 100 BaseT Ethernet with Status LEDs
	2x USB 2.0 High Speed Type A Host ports & 1x USB 2.0 High Speed Type C OTG port
	1x Audio Buzzer
	4x Serial Ports (3x RS232 & 1x RS232/422/485 Port)
	Battery backed Real Time Clock
	4x MIPI-CSI Lanes
	1x I2C Port
	System reset button
Video	WVGA (800 x 480) Resolution with LED Backlight (800 Nits)
	4x MIPI DSI Lanes and LVDS
	Software Controlled Backlight On/Off & Brightness
Analog	4x A/D Channels with 12-bit A/D Converter - 4-wire resistive touchscreen Controller
Wireless	Wireless 802.11a/b/g/n & Bluetooth 5.1
OS	EMAC OE Embedded Linux
Dimensions	7.55" x 4.15" x 1.15" (191mm x 105mm)
Power Req.	12V (+12 to +28 V DC)
	Typical Running Current Consumption TBD
Environment	(Note: Up to 1.5A is Req. if USB Host is providing power to 3x USB devices)
	-20° to +70° C *Note: Temperature limited by LCD





Ordering Information

*(bottom of board)

PRODUCT #	CPU	MEMORY	SERIAL	GPIO	USB	VIDEO	CONNECTIVITY	TEMPERATURE
PPC-07-35D1-1R	Nuvoton MA35D1	512MB DDR3 SDRAM 4GB eMMC FLASH 16MB Serial Data Flash	4x	16x	2x Host 1x OTG	WVGA (800x480) LCD Graphic Touch Screen	1x GB & 1x 100 BaseT LAN WiFi 802.11a/b/g/n Bluetooth 5.1	-20° to +70° C

Optional Accessories

PRODUCT #	DESCRIPTION
PER-PWR-00035	12V @ 2.1A Wall Power Supply (110V @ 60 HZ US)
PER-PWR-00075	12V @ 2.1A, 90-264V @ 47-63Hz input, Universal power prongs for worldwide use, 2.1mm Barrel
PER-PWR-00090	12V @ 2.5A Desktop Power Supply, standard IEC 320-C14 input connector, 2.1mm barrel jack output
PER-MIS-00050	2.4GHz & 5GHz WiFi Antenna with 10 cm cable, IPEX connector, adhesive antenna.

Compatible SOMS

PRODUCT #	DESCRIPTION
SOM-35D1F122	Nuvoton MA35D1, 512MB RAM, 4GB flash CSI - 30 to 85°C
SOM-35D1F-212	Nuvoton MA35D1, 512MB RAM, 4GB flash - 40 to 85°C
SOM-RZG2L	Renesas RZ/G2L, 2/4GB RAM, 8GB flash, CSI - 40 to 85°C
SOM-RZV2L	Renesas RZ/V2L, 4GB RAM, 8GB flash, DRP-AI, CSI - 40 to 85°C