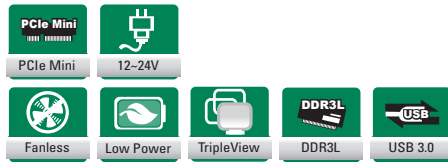


MANO311 NEW

Mini-ITX SBC with Intel® Celeron® Processor N3350, Dual HDMI/LVDS, USB 3.0, PCI Express Mini Card, mSATA and HD Audio

Features

- Intel® Celeron® processor N3350
- 1 DDR3L SO-DIMM up to 8GB
- 4GB DDR3L memory down (optional)
- PCI Express Mini Card slot and PCIe x1
- 4 USB 3.0 and 2 USB 2.0
- 1 SATA-600, 1 mSATA and 1 SDXC
- 6 COM supported
- 12 ~ 24 VDC

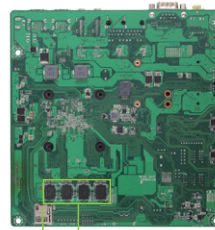
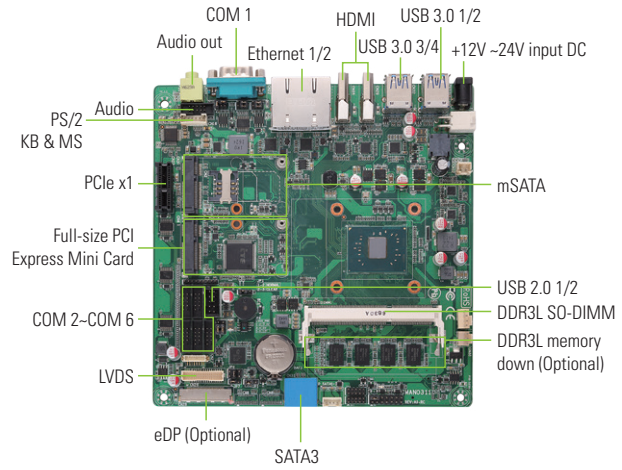


Core System

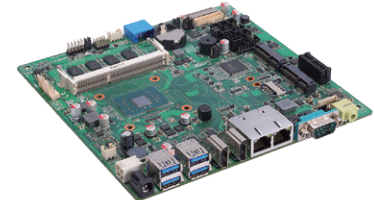
CPU	Intel® Celeron® processor N3350
System Memory	1 x 204-pin DDR3L-1867 SO-DIMM, up to 8GB 4GB memory down (optional)
Chipset	SoC integrated
BIOS	AMI
SSD	1 x mSATA 1 x SDXC slot
Watchdog Timer	255 levels, 1 ~ 255 sec.
Expansion Interface	1 x PCIe x1 1 x PCI Express Mini Card slot 1 x SIM card slot
Battery	Lithium 3V/220 mAh
Power Requirements	12 ~ 24 VDC
Size/Weight	170 x 170 mm
Board Thickness	1.6 mm
Temperature	0°C ~ +60°C (+32°F ~ +140°F), operation
Operation Humidity	10% ~ 95% relative humidity, non-condensing

I/O

MIO	1 x PS/2 keyboard and mouse 1 x RS-232/422/485 (Rear I/O) 5 x RS-232 (COM 2 with +5/+12V powered)
SATA	1 x SATA-600
Ethernet	2 ports 10/100/1000 Mbps support Wake-on-LAN, PXE with Realtek RTL8111F
Audio	HD Codec audio as Mic-in/Line-out with Realtek ALC662
USB	2 x USB 2.0 (internal) 4 x USB 3.0 (rear I/O)
TPM	N/A
Digital I/O	16 channels In/Out programmable
SMBus	N/A



SDXC slot
▲ Rear view



▲ Side view

Display

Chipset	Intel® integrated Gfx graphic engine
Memory Size	Shared memory
Display Interface	2 x HDMI 1 x LVDS; 18/24-bit dual channel 1 x eDP (optional)

Packing List

Standard	User's manual/utility CD and I/O bracket
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Ordering Information

Standard	
MANO311HGGA-N3350	Mini-ITX SBC with Intel® Celeron® processor N3350 (1.1 ~ 2.4 GHz, 2MB cache, 6W), dual HDMI/LVDS, 2 GbE LANs, 6 COM, USB 3.0, mSATA, PCI Express Mini Card slot and HD audio

Optional	
59411500600E	SATA power cable, 4-pin, L=180 mm (RC)
593M8810300E	COM port cable, pitch=2.0 mm, L=300 mm
594M5002A00E	6-pin wafer to PS/2 cable, pitch=2.0 mm, L=200 mm
59384500100E	Audio cable w/bracket, pitch=2.0 mm, L=420 mm
59386831000E	2-port USB cable w/ bracket, 5-pin header, pitch=2.54 mm, L=180 mm

