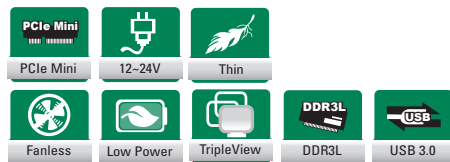


MANO311

Thin 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 for up to 8GB of memory
- 4GB DDR3L onboard memory (optional)
- 1 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
- Supports 6 COM
- Low profile

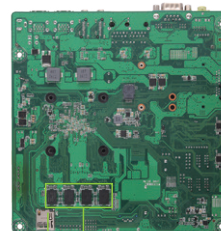
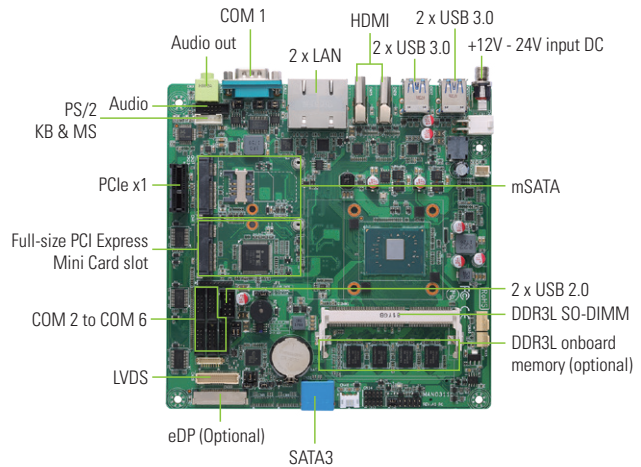


Core System

CPU	Intel® Celeron® processor N3350
System Memory	1 x 204-pin DDR3L-1867 SO-DIMM, up to 8GB 4GB onboard memory (optional)
Chipset	SoC integrated
BIOS	AMI
SSD	1 x mSATA 1 x SDXC slot
Watchdog Timer	255 levels, 1 to 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 Input	1 x DC Jack 12V/5A adapter 1 x 4-pin connector +12 to 24V DC-in
Dimensions	170 x 170 mm
Board Thickness	1.6 mm
Operating Temperature	0°C to +60°C (+32°F to +140°F)
Humidity	10% to 95% relative humidity, non-condensing

I/O

SATA	1 x SATA-600
Ethernet	2 x 10/100/1000 Mbps Ethernet with Realtek RTL8111F with support for support Wake-on-LAN and PXE Boot ROM
Audio	HD Codec audio as Mic-in/Line-out with Realtek ALC662/897
USB	2 x USB 2.0 (internal) 4 x USB 3.0 (rear I/O)
Seria	1 x RS-232/422/485 (rear I/O) 5 x RS-232 (COM 2 with +5/+12V powered)
PS/2 Combo Port	1 x PS/2 keyboard and mouse
TPM	N/A
SMBus	N/A
Digital I/O	16-channel in/out programmable



SDXC slot
DDR3L memory
▲ 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/heatsink

Ordering Information

Standard	
MANO311HGGA-N3350 (P/N: E38M311100)	Mini-ITX SBC with Intel® Celeron® processor N3350 (1.1 to 2.4 GHz, 2MB cache, 6W), 2 HDMI, LVDS, 2 GbE LAN, 6 COM, USB 3.0, mSATA, PCI Express Mini Card slot and HD audio

Optional	
594P8800600E	SATA power cable, 4-pin to 15-pin, P=2.0 mm, L=200 mm
59382620000E	COM port cable, P=2.0 mm, L=300 mm
594M5002A00E	6-pin wafer to PS/2 cable, P=2.0 mm, L=200 mm
59384500100E	Audio cable with bracket, P=2.0 mm, L=420 mm
59386831000E	2-port USB cable with bracket, 5-pin header, P=2.54 mm, L=180 mm
59381560000E	6-pin PS/2 cable adapter
E9CA000012	MANO311 half height rear I/O metal shield