



EMX-BSWP

Intel® Celeron® Processor N3160 Thin Mini ITX Motherboard

- > Intel® Celeron® Processor N3160 (2M Cache, up to 2.24 GHz)
- > 2 x 204-pin DDR3L 1600 MHz SO-DIMM supports up to 8GB
- > VGA, HDMI, Dual channel 18/24-bits LVDS
- > 2 x Intel® i211AT Gigabit Ethernet
- > Realtek ALC662 Audio Codec
- > Realtek ALC105 Stereo Class-D 3W x 2 Audio Amplifier
- > 1 x Mini PCI-e Supported mSATA, 1 Mini PCI-e, 1 x PCI-e
- > 2 x SATA III, 2 x SATA Power, 4 x USB 2.0, 4 x USB 3.0
- > 5 x RS232, 1 x RS232/422/485, 8-bit GPIO
- > Mic-in, Line-out, 1 S/PIDF, SD card slot, Optional Infineon SLB9665 TPM 2.0
- > Onboard eMMC (Optional 32GB)

+ Spec

System	
Processor	Intel® Celeron® Processor N3160 (2M Cache, up to 2.24 GHz)
System Memory	2 x 204-pin DDR3L 1600 MHz SO-DIMM supports up to 8GB
I/O Chip	EC iTE IT8528E
BIOS	AMI 64Mbit SPI BIOS
Watchdog Timer	H/W Reset: 1sec. ~ 65535sec./min. and 1sec. or 1min./step
H/W Status Monitor	Monitoring System Temperature and Voltage with Auto Throttling Control
Expansion	
Expansion	1 x PCI-e 1 x Mini PCI-e Supports mSATA (Switch Through Jumper) 1 x Mini PCI-e 1 x SD card slot Supports SD/ SDHC Card 1 x SIM card slot
I/O	
USB	4 x USB 2.0 4 x USB 3.0
SATA	2 x SATA Power 2 x SATA III
COM Port	5 x RS232 1 x RS232/422/485
Other	1 x S/PDIF
DIO	1 x 8-bit GPIO
Display	
Chipset	Intel® Atom™/ Celeron® SoC integrated Graphics HDMI + LVDS, HDMI + VGA, VGA + LVDS
Resolution	VGA: 2560 x 1600 @ 60Hz HDMI: 3840 x 2160 @ 30Hz LVDS: 1920 x 1080 @ 60Hz
LVDS	2CH 18/24bits LVDS 1920 x 1080 Chrontel. CH7511B eDP to LVDS Converter
Multiple Display	HDMI + LVDS, HDMI + VGA, VGA + LVDS
Audio	
Chipset	Realtek ALC662 supports 2-CH
Audio Interface	Mic-in, Line-out
Audio Amplifier	2 x Stereo Class-D 3W Audio Amplifier
Ethernet	
Chipset	2 x Intel I211AT Gigabit Ethernet
Ethernet Interface	10/100/1000 Base-Tx GbE compatible
LAN Port	2 x RJ45
Mechanical & Environmental	
Power Requirement	+12V
Power Type	AT/ATX
Operating Temp	0 ~ 60°C (32 ~ 140°F)
Storage Temp	-40 ~ 75°C (-40 ~ 167°F)
Operating Humidity	0 ~ 90% Relative Humidity, Non-condensing
Dimension (L x W)	6.69" x 6.69" (170mm x 170mm)
Weight	0.88lbs (0.4Kgs)

+ Ordering

EMX-BSWP-A1R
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