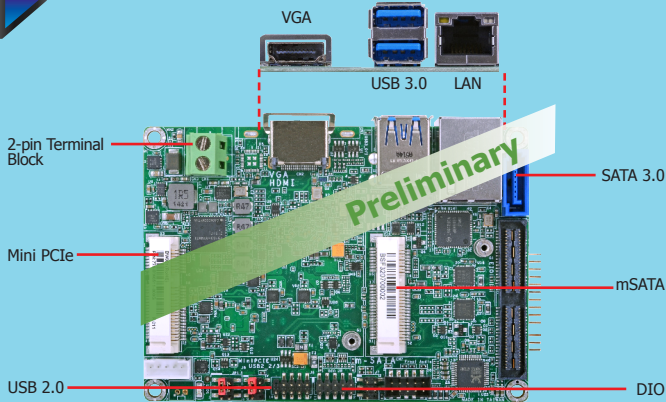
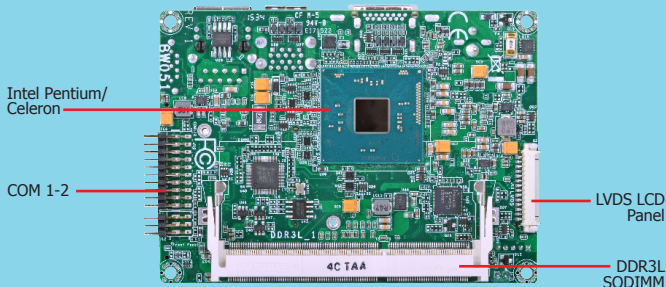


BW051

Atom



Top View



Bottom View

Features

- Small form factor 2.5" Pico-ITX for space-limited applications
- 1 DDR3L SODIMM up to 8GB
- Dual independent displays: VGA*/HDMI + LVDS
- Expansion and Storage: 1 Mini PCIe, 1 mSATA, 1 SATA 3.0
- Rich I/O: 1 Intel GbE, 2 COM, 2 USB 3.0, 2 USB 2.0

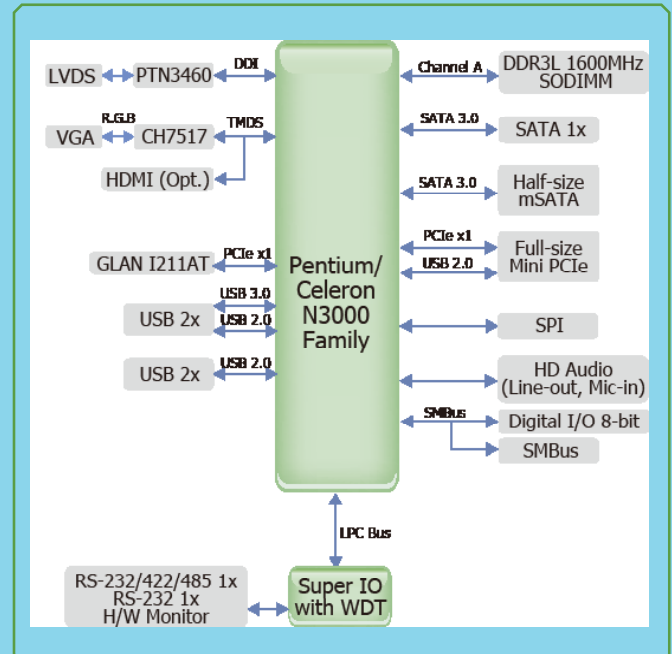
* Populated by default



Mechanical Drawing



Block Diagram



BW051

► Specifications

SYSTEM	Processor	Intel® Pentium®/Celeron® Processor N3000 Family, BGA 1170
	Memory	One 204-pin SODIMM up to 8GB Single Channel DDR3L 1600MHz
	BIOS	Insyde SPI 64Mbit
GRAPHICS	Controller	Intel® HD Graphics
	Feature	OpenGL 4.2, Direct X 11.1, OpenCL 1.2, OGL ES 3.0 HW Decode: H.264, MPEG2, VC1, VP8, H.265, MPEG4 HW Encode: H.264, MPEG2, MPEG4
	Display	1 x VGA/HDMI (HDMI available upon request) VGA: resolution up to 1920x1200 @ 60Hz 1 x LVDS HDMI: resolution up to 1920x1080 @ 60Hz LVDS: single channel 24-bit, resolution up to 1366x768 @ 60Hz
	Dual Displays	VGA + LVDS HDMI + LVDS
EXPANSION	Interface	1 x Half-size mSATA (SATA) 1 x Full-size Mini PCIe (PCIe/USB)
AUDIO	Audio Codec	Realtek ALC888S-VD2-GR
ETHERNET	Controller	1 x Intel® I211AT PCIe (10/100/1000Mbps)
REAR I/O	Ethernet	1 x GbE (RJ-45)
	USB	2 x USB 3.0
	Display	1 x VGA/HDMI (HDMI available upon request)
INTERNAL I/O	Serial	1 x RS-232/422/485 (RS-232 w/ power) (2.0mm pitch, right angle type) 1 x RS-232 (2.0mm pitch, right angle type)
	USB	2 x USB 2.0 (2.0mm pitch)
	Display	1 x LVDS LCD Panel Connector
	Audio	1 x Audio (Line-out/Mic-in)
	SATA	1 x SATA 3.0 (up to 6Gb/s)
	DIO	1 x 8-bit DIO
	SMBus	1 x SMBus
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	TPM	Available Upon Request
POWER	Type	Single 12V +/-10% DC
	Connector	2-pin Terminal Block
	Consumption	TBD
	RTC Battery	Lithium 3V (210mAH)
OS SUPPORT		Windows 7 (32/64-bit) WES 7 Windows 8.1 (64-bit) WE8S Windows 10
ENVIRONMENT	Temperature	Operating: 0 to 60°C Storage: -40 to 85°C
	Humidity	Operating: 5 to 90% RH Storage: 5 to 90% RH
MECHANICAL	Dimensions	2.5" Pico-ITX Form Factor 100mm (3.94") x 72mm (2.83")
	Height	PCB: TBD Top Side: TBD, Bottom Side: TBD

► Ordering Information

Model Name	P/N	Processor	Memory	VGA/HDMI	GbE	RS-232/422/485	RS-232	USB 3.0	USB 2.0	Power	Thermal	Temp.
BW051-BB	TBD	Celeron	1 SODIMM	VGA	1	1	1	2	2	12V DC	Fanless	0 to 60°C

► Packing List

• 1 BW051 board	
• 1 COM port cable (Length: TBD)	TBD
• 1 Serial ATA data cable (Length: 300mm)	332-553001-205G
• 1 Audio cable (Length: TBD)	TBD
• 1 Y cable for SATA and inverter power (Length: TBD)	TBD
• 1 DVD	
• 1 QR (Quick Reference)	
• 1 Heat sink (Height: TBD)	TBD

► Optional Items

• USB port cable (Length: 200mm)	332-753059-000G
• Power adapter (60W, 12V) (Length: TBD)	TBD
• Power adapter (120W, 12V) (Length: TBD)	TBD
• Heat spreader (Height: TBD)	TBD