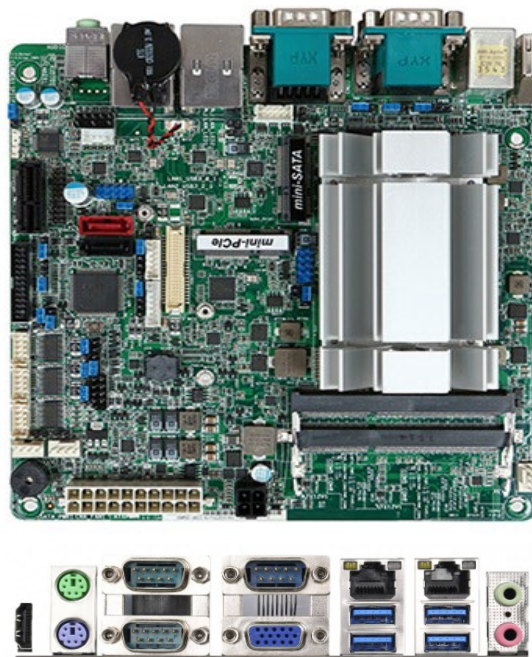


# The4thware Industrial Board (MITX)

Intel Celeron N3160 Platform

T4WP-N3160-MITX



## PRODUCT SPECIFICATION

Specification	
CPU	Intel® Celeron® Processor N3160(4 x 1.60 GHz, 2 MB L2, 6 W)
Format	Mini-ITX
Chipset	SoC (System-On-Chip)
DRAM	Up to 8 GB DDR3L 1600/1333 MHz memory (non-ECC) on 2x204-pin, SODIMM socket
Graphic Controller	Integrated Intel® Generation 8 Graphics, Supports DirectX 11.1, OpenGL 4.2, OpenCL 1.2
Display Interface	LVDS dual channel 24bit LVDS on board connector, up to 1920x1200 HDMI up to 3840x2160 VGA up to 1920 x 1200 , on rear I/O
Storage	2x SATA III ports, 1x mSATA (shared with SATA III)
Network	2x RJ45 connectors on rear I/O (Realtek® RTL8111G)
Expansion	1x PCIe 2.0 x1 slot, 1x full/half-size mini-PCIe socket (USB + PCIe x1 signal), 1x full size mini-PCIe socket (support mSATA)
Bus Interface	1x PCIe x1 slot (Gen2, 5GT/s), 1x M.2 socket (KEY E 2230) with PCIe x1 and USB(shared) for Wireless, 1x full/half size Mini PCIe socket with PCIe x1 and USB(shared)
Serial Interface	1x RS232 port on rear I/O, 1x RS232/422/485 selectable port on rear I/O, 3x RS232 with header
USB	4x USB 3.0 Ports on rear I/O, 4x USB 2.0 Ports on pin header
Audio	Intel® High DefinitionAudio interface Realtek® ALC887 High DefinitionAudio 1x jumbo jack support Line-out/Mic-in
Miscellaneous	Programmable watchdog timer, time out period from 1 sec to 255 secs., Hardware monitoring - Temperature (CPU & System), Voltages (CPU Vcore, 12V, 5V, 3.3V, RAM)
Firmware	AMI uEFI BIOS
Power Requirement	12V (+/- 5%) or 19V-24V (+/- 5%)
Operating Temperature	0°C - 60°C
Storage Temperature	-20~80°C
Dimensions	170x170 mm
MTBF	Over 120,000hrs at 40°C
DRAM	Up to 8 GB DDR3L 1600/1333 MHz memory (non-ECC) on 2x204-pin, SODIMM socket