



INDUSTRIAL MOTHERBOARD

CT-DWL01

3.5" SBC Industrial Motherboard with 8th Gen. Intel® Core™ Processor



Features

- Support 8th Gen. Intel® Core™ Mobile U Processor & Intel® Celeron® Processor
- 1x 260-pin DDR4 2400 SO-DIMM. Max. up to 32GB
- 2x Intel® GbE (Support Wake-on-LAN and PXE)
- Triple independent display supported
- 1x HDMI (Optional) support resolution 1920 x 1200,
- 1x DisplayPort support resolution 4096 x 1200,
- 1x Dual-channel, up to 24-bit LVDS optional 1x eDP via internal connector
- 1x Front Panel with Audio support by internal header
- 2x 4bit GPIO header
- 2x Mini PCI-e (Gen3) w/ SIM slot support
- 4x USB 3.2 Gen 2 (10Gbps), 4x RS-232/422/485 internal headers, 2x USB 2.0 internal header
- 2x SATA 6.0Gb/s
- Watchdog timer 1~225sec. system reset
- TPM 2.0 Supported

Specifications

System	
Processor	• Support 8th Gen. Intel® WL-UE Processor (15W TDP) • Intel® Core™ i7-8665UE Processor 8M Cache, up to 4.40 GHz • Intel® Core™ i5-8365UE Processor 6M Cache, up to 4.10 GHz • Intel® Core™ i3-8145UE Processor 4M Cache, up to 3.90 GHz • Intel® Celeron® Processor 4305UE 2M Cache, 2.00 GHz
System Chipset	SoC
LAN Chipset	GbE1: Intel® I219LM (Support Wake-on-LAN and PXE) GbE2: Intel® I210-IT (Support Wake-on-LAN and PXE)
Audio Codec	Realtek ALC888S HD Audio Codec
System Memory	1x 260-Pin DDR4 2400MHz SO-DIMM slot, Max 32GB
Graphics	Intel® UHD Graphics 620 for Core series Intel® UHD Graphics 610 for Celeron series
BIOS	AMI uEFI 256MB SPI flash
Watchdog	Software Programmable Supports 1~255 sec. System Reset
TPM	TPM 2.0
Display	
Display Port	1x DP support resolution 4096 x 1200
HDMI	1x HDMI (Optional) support resolution 1920x 1200
LVDS	1x LVDS & 1x EDP Internal Connector
Multiple Display	Triple Display
Expansion	
Mini PCIe	2x Mini PCIe x1 (Gen 3)
Rear I/O	
LAN	2x RJ45
USB	4x USB 3.2 Gen 2 (10Gbps)
Others	1x Power LED, 1x HDD LED
Internal I/O	
Audio	1x Front panel audio
COM	4x RS-232-/422/485 Internal 2.0PH headers
DIO	2x 4-bit DIO (4-in/4-out) via a PH2.0 2x 10 pin header, (PIN1_VCC, PIN2_GND)
SATA	2x SATA Gen3, with 2x 4pin SATA power connector
USB	2x USB 2.0 Internal 2.0PH Headers
Others	1x Front panel 1x 4-pin PWM smart fan 1x Debug port 1x RTC battery by cable
Operating System	
Windows	Microsoft® Windows® 10 64-bit (RS5 or above)
Linux	Linux Kernel 5.x (Fedora 30 or above / Ubuntu 19.04 or above)
Power	
Power Management	ACPI
Power Mode	AT/ATX 12V DC Input
Power Connector	4-pin CPU P4 connector
Mechanical Environment	
Form Factor	3.5" Embedded SBC
Operating Temperature	-40°C ~ 70°C, 95% (non-condensing)
Storage Temperature	-40°C ~ 85°C, 95% (non-condensing), Non-operating
Certification	CE, FCC Class A

Physical	
Dimensions	146 x 102mm

Available Models

- CT-DWL01-8665UE
3.5" Industrial Motherboard with 8th Gen Intel® Core™ i7-8665UE
- CT-DWL01-8365UE
3.5" Industrial Motherboard with 8th Gen Intel® Core™ i5-8365UE
- CT-DWL01-8145UE
3.5" Industrial Motherboard with 8th Gen Intel® Core™ i3-8365UE
- CT-DWL01-4305UE
3.5" Industrial Motherboard with Intel® Celeron® 4305UE

Packing List

- 1x Heat Sink
- 1x Front Panel Cable, 2x Buttons, 2x Audio, 2x LED Cable 300mm
- 1x COM Port Cable 300mm
- 1x SATA Y-Cable with SATA and SATA Power 100mm
- 1x USB 2.0 Y Cable to 2x USB2.0 Type-A Cable 300mm
- 1x Driver DVD
- 2x Screw for mini-PCI-e Card
- 4x Cooper Stud and screw for Heatsink

US Exports And Tariff Codes

ECCN	5A992.c
HTS	8504.90.2000
ScheduleB	8473.30.0002

* All specifications and photos are subject to change without notice.