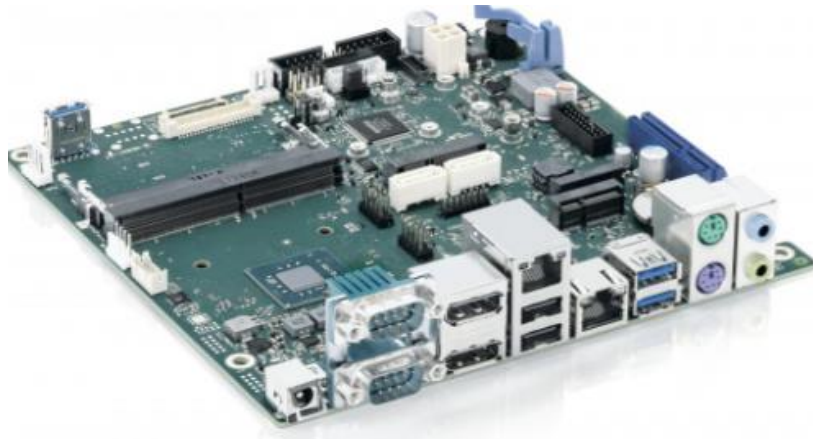


# CEX – D3543-S mITX

INDUSTRIAL MOTHERBOARD SUPPORTING THE INTEL® CELERON® PROCESSORS J4005/J4105

& INTEL® PENTIUM® SILVER PROCESSOR J5005



## • Features

- Dual DP V1.2a, LVDS & eDP V1.4
- M.2 SSD & M.2 WLAN Slots onboard
- HW Watchdog, GPIO & PCIe Slots
- WideRange DC Power Supply (8V-36V)
- Designed for Fanless Operation

## Specifications

System	
<b>Processor</b>	Intel® Celeron® Processor J4005 (DC @2.0 GHz/2.7 GHz) Intel® Celeron® Processor J4105 (QC @1.5 GHz/2.5 GHz) Intel® Pentium® Silver Processor J5005 (QC @1.5 GHz/2.8 GHz)
<b>Chipset</b>	SoC (System on Chip)
<b>Memory</b>	2x SO DIMM Socket (1.2 V), max. 24 GByte, DDR4 2400 SDRAM
Video	
<b>Graphics</b>	Integrated Intel® UHD Graphics 600/605
Audio	
<b>Audio Codec</b>	Realtek ALC671
<b>Audio Interface</b>	5.1-channel, High Definition Audio Codec
Network Connection	
<b>Ethernet</b>	1x Intel® i210 with 10/100/1000MBit/s, 1x Realtek RTL8111G with 10/100/1000 MBit/s
Peripheral Connection	
<b>USB</b>	2x USB 2.0, 4x USB 2.0 (by header) 2x USB 3.1 Gen1 + 2x USB 3.1 Gen1 (by header) 1x USB 3.1 Gen1 stick socket
<b>Serial Port</b>	2x RS232, 1x RS232 (limited feature set, by header), 1x RS232/RS422/RS485 (limited feature set, by header)
<b>Other I/Os</b>	GPIO (by header)
Storage & Expansion	
<b>SATA</b>	2x Serial ATA (SATA) III 600 Interface (up to 6GBit/s), NCQ, AHCI; 1x M.2 Key-E (2230), 1x Mini-PCIe (halfsize/fullsize), 1x M.2 Key B socket (2242/2260/2280)
<b>PCIe/PCI Slots</b>	1x PCIe x4
Power	
<b>Connector</b>	External DC Input 8 V-36 V (5 A max. / 100 W max.)
<b>Input Voltage</b>	Internal DC Input 8 V-36 V (8 A max. / 100 W max.) Onboard SoC and system voltage regulators (high efficiency)
Firmware	
<b>BIOS</b>	AMI Aptio 5.x (UEFI) BIOSmodified and adapted by Fujitsu Technology Solutions; Recovery BIOS, SM-BIOS (DMI), BIOS and CPU Microcode Update, Quick Boot, Logo Boot,

	<p>Quiet Boot, Plug &amp; Play, Automatic DRAM Configuration, BIOS Support for S.M.A.R.T., Advanced Power Management, ACPI S3/S4, Wake on time from S5.</p> <p>Boot support for M.2 SSD (AHCI / NVME) BIOS integrated HW Diagnostic Tool,</p> <p>Watchdog Support</p> <p>No legacy OS support, no MBR installation (UEFI only due to Intel restrictions)</p>				
<b>Watchdog</b>	2-Level WD (BIOS Boot WD / OS WD)				
<b>Real Time Clock</b>	Integrated				
<b>TPM</b>	Intel® integrated TPM V2.0				
<b>System Control</b>					
<b>FP HEADER</b>	1x Header for Reset button, HDD LED, Power button, Power LED				
<b>Security</b>	<p>Recovery BIOS, System and BIOS Password, Boot Sequence Control for each drive, Serial Port Access Protection, TPM 1.2, Write Protection for Flash BIOS, Harddisk Password incl. "Silent Password" option (no keyboard entry required), Erase Disk (BIOS Feature)</p>				
<b>Cooling</b>					
<b>Fan</b>	2x PWM fan (CPU/System)				
<b>Software</b>					
<b>OS Support</b>	<p>MS Windows 10</p> <p>Linux-64</p>				
<b>Mechanical</b>					
<b>Dimensions (L x W)</b>	Mini-ITX: 6.7" x 6.7" (170 x 170 mm)				
<b>Certifications</b>					
<b>EMC &amp; Safety</b>	FCC-B verified cTÜVus acc. IEC62368-1 (upon request), CE Class B				
<b>Power Supply Requirements</b>					
<b>DC-In (wide range)</b>	Voltage Range	Min. PS Load	Max. Voltage Tolerance	TYP. Motherboard Input Power*	Max. Motherboard Input Power**
	8 – 36V	0 A	± 5 %	5 W - 15 W	100 W
*) Motherboard incl. Memory and M.2 SATA SSD (MS Windows 10 Idle Mode / Full Load)					
**) Motherboard incl. Memory, M.2 SATA SSD, any USB Devices, any LVDS / eDP devices, any SATA devices					
<b>Motherboard Versions</b>					
	<b>Processor (SoC)</b>	<b>Graphics</b>	<b>Memory</b>	<b>Graphics</b>	
D3543-S1	Intel® Celeron®	Intel® UHD 600	DDR4 /	2x DP V1.2	

	J4005 (Dual Core) 2.0 GHz / 2.7 GHz*	12EUs; max. 8 GByte 250 MHz / 700 MHz**	2400 two sockets max. 24 GByte	max. 4096 x 2160 @60 Hz
D3543-S2	Intel® Celeron® J4105 (Quad Core) 1.5 GHz / 2.5 GHz*	Intel® UHD 600 12EUs; max. 8 GByte 250 MHz / 750 MHz**		1x eDP V1.4 2 lanes max. 1920 x 1200
D3543-S3	Intel® Pentium® Silver J5005 (Quad Core) 1.5 GHz / 2.8 GHz*	Intel® UHD 605 18EUs; max. 8 GByte 250 MHz / 800 MHz**		1x LVDS 24Bit Dual Channel max. 1920 x 1200  max. 3x independent display ***)

\*) CPU Base Frequency / Burst Frequency

\*\*) Graphics Base Frequency / max. Dynamic Frequency

\*\*\*) Following max. display combinations are supported:

1x DisplayPort (external) + 1x LVDS (internal) + 1x embedded DisplayPort (internal) 2x DisplayPort (DP, external) + 1x embedded DisplayPort (eDP, internal) Note: Simultaneous use of LVDS and DP2 (upper port) is not possible