

### A smart controller conceived by Contec Embedded Computer for Machine Control

## EPC-4000 Series







**EPC-4000P4** (4 slots)



EPC-4000 (No slots)



## High-speed expansion slots

The P2 model featuring PCle(x8)x2 slots and the P4 model featuring PCle(x4)x4 slots with built-in low-latency Broadcom PCle switches are both available. This makes it possible to select expansion cards for image processing, camera input, FPGA, NIC, and other purposes with no need to compromise on card selection.





# Highly noise-resistant design with separated FG and SG

Produced by motors and other rotating devices, as well as by high-power actuators, induction noise is the great enemy of electronic devices. Separating the FG (frame ground) and SG (signal ground) prevents malfunctions caused by induction noise from the FG.



## Custom BIOS supporting real-time OS

The CPU cores/threads and onboard devices can be flexibly customized to match the OS. System availability is improved by original functions such as storage backup/restore and self-diagnosis functions.



## High-power, Fan-cooled Type EPC-4000 Series



#### Ordering Information

Model	Expansion slots	CPU / Memory	Storage	os
EPC-4000-DC3941E	No slots	Core i7-8700T 2.4GHz / 16GB		
EPC-4000-DC2841E	INO SIOIS	Core i5-8500T 2.1GHz / 8GB		
EPC-4000P2-DC3941E	2 slots (PCle(x8))	Core i7-8700T 2.4GHz / 16GB	256GB SSD TLC	Windows 10 IoT Enterprise 2019 LTSC 64-bit
EPC-4000P2-DC2841E	2 SIOIS (PCIE(XO))	Core i5-8500T 2.1GHz / 8GB	250GB 55D TLC	(English/Chinese/Japanese/Korean)
EPC-4000P4-DC3941E	4 alota (DCIa(v4))	Core i7-8700T 2.4GHz / 16GB		
EPC-4000P4-DC2841E	4 slots (PCIe(x4))	Core i5-8500T 2.1GHz / 8GB		

<sup>\*</sup> Models with no OS installed are also available. Visit the Contec website for more information

#### Specifications

Item	EPC-4000	EPC-4000P2	EPC-4000P4		
CPU	Intel <sup>®</sup> Core <sup>™</sup> i7-8700T Processor 2.4GHz, In	tel <sup>®</sup> Core™ i5-8500T Processor 2.1GHz			
Chipset	Intel® Q370				
BIOS	AMI BIOS				
Security (TPM)	TCG TPM2.0				
Memory	Max16GB, 260pin SO-DIMM Socket x 2, DDR4-2666 SDRAM Non-ECC				
Graphics	Intel® HD Graphics 630 DVI-D x 1, DisplayPort x 1				
Audio	HD Audio compliant, LINE OUT x 1, LINE IN x 1, MIC IN x 1				
Storage (System)	SATA III 2.5" SSD 256GB (3D-TLC) or None				
CFast I/F	CFast Slot x 1ch. With anti-release mechanism				
LAN	1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector x 3 Transmission speed: 1000M/100M/10M bps LAN-A, B: Intel I210AT Controller, LAN-C: Q370 embedded controller + PHY I219LM				
JSB	USB 3.2 Gen2-compliant (10Gbps) x 6, USB 3.2 Gen1-compliant (5Gbps) x 2				
Serial	RS-232C 9pin D-SUB x 1 RS-232C/RS-422A/RS-485 (Switchable in BIOS settings) 9pin D-SUB x 1 Baud rate : 50 to 115,200bps (Programmable)				
Expansion Card Slot	No slots	PCI-Express(x8) slot x 2 (x16 mounted connector)*1	PCI-Express(x4) slot x 4*1		
Hardware monitoring	Monitoring CPU temperature, fan speed, power voltage				
Vatchdog timer	Software programmable, 255 level (1sec to 255sec) Time up allows reset				
Real Time Clock	Lithium backup battery life: 10 years or longe	er, The real-time clock is accurate within ±3 minu	utes (at 25°C) per month (CPU built-in RTC).		
Power Management	Power management setup via BIOS, Power On by Ring / Wake On LAN				
Rated Input Voltage	12 to 24VDC				
Range of Input Voltage	10.8 to 26.4VDC				
Power Consumption (Max.)	< With USB supply > 6.9 A (Max.) at 12 V input 3.5 A (Max.) at 24 V input < Without USB supply > 3.5 A (Max.) at 12 V input 1.8 A (Max.) at 24 V input	< USB with expansion slot supply > 14.5 A (Max.) at 12 V input 7.2 A (Max.) at 24 V input < USB, without expansion slot supply > 4.1 A (Max.) at 12 V input 2.0 A (Max.) at 24 V input	< USB with expansion slot supply > 16.1 A (Max.) at 12 V input 7.8 A (Max.) at 24 V input < USB, without expansion slot supply > 5.1 A (Max.) at 12 V input 2.2 A (Max.) at 24 V input		
USB Supply Current	USB I/F +5V: 7.2A				
Capacity for power supply o the expansion card	None	+12V : 2.1A, +3.3V : 3A*4	+12V : 2.1A, +3.3V : 3A*4		
Physical dimensions mm/inch) *2	230/9.06(W) x 220/8.66(D) x 70/2.76(H)	230/9.06(W) x 220/8.66(D) x 109/4.29(H)	230/9.06(W) x 220/8.66(D) x 160/6.3(H)		
Veight *3	2.8kg / 6.17lb (approx.)	3.4kg / 7.50lb (approx.)	4.1kg / 9.04lb (approx.)		
Operating temperature	0 to 55°C / 32 to 131°F				
Standard	CCC '5, CE Marking (EMC Directive Class A, RoHS Directive), FCC Class A, UKCA, UL, VCCI Class A				

<sup>\*1</sup> Usable card dimension:Max. 176mm(L) x 110mm(H). \*2 Not including the attachment fitting or protrusions. \*3 The weight (which does not include accessories) may vary depending on the product configuration.

#### Options

<b>Product Name</b>	Model	Description
	CFS-4GB-A	4GB (SLC)
	CFS-8GB-A	8GB (SLC)
CFast Card	CFS-16GB-A	16GB (SLC)
	CFS-32GBM-A	32GB (MLC)
	CFS-16GBQ-A	16GB (Q-MLC)

Product Name	Model	Description
Bracket	EPC-BKT	Bracket for EPC-4000 and 4000P2 Series
	EPC-P4-BKT	Bracket for EPC-4000P4 Series





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<sup>\*4</sup> The total capacity for power supply to the expansion card of the expansion slot model (2 slots or 4slots) must fall within 50 W (25W or less per slot). \*5 Models without storage (no OS) are not covered by CCC.