



**4th Gen Intel® Core™  
Modular-Designed Embedded System**

**EC541-HD**

**H81**



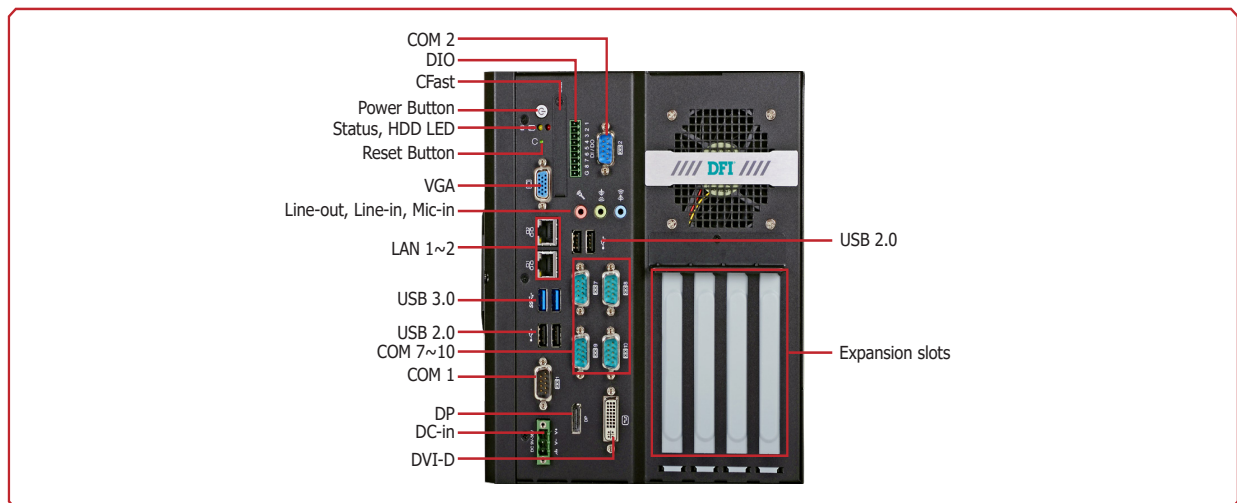
**Features**

- Supports DDR3 SODIMM up to 16GB
- 2 2.5" SATA drive bays, 1 CFast socket
- 4 expansion slots

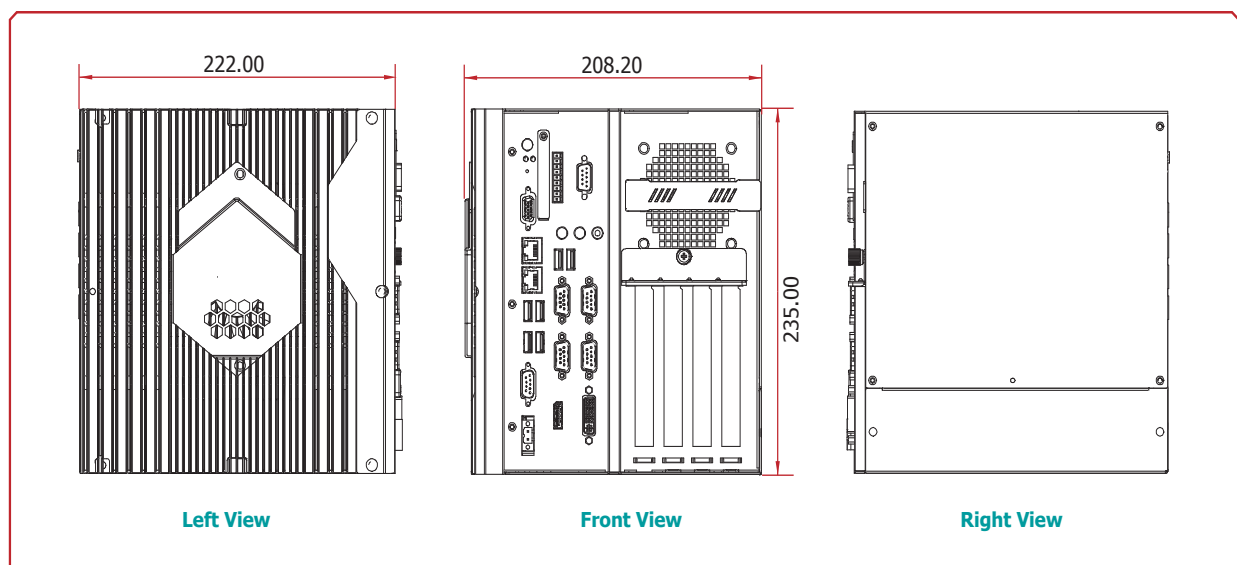


1 Vertical USB for securing data from unauthorized access

**Panel**



**Dimensions**



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**Specifications** \* Optional and is not supported in standard model. Please contact your sales representative for more information.

**PROCESSOR SYSTEM**

- CPU - fanless
  - 4th Generation Intel® Core™ processors (22nm process technology)
    - : Intel® Core™ i7-4770TE (8M Cache, up to 3.3 GHz); 45W
    - : Intel® Core™ i5-4590T (6M Cache, up to 3.0 GHz); 35W
    - : Intel® Core™ i5-4570TE (4M Cache, up to 3.3 GHz); 35W
    - : Intel® Core™ i3-4350T (4M Cache, 3.1 GHz); 35W
    - : Intel® Core™ i3-4340TE (4M Cache, 2.6 GHz); 35W
    - : Intel® Core™ i3-4330TE (4M Cache, 2.4 GHz); 35W
    - : Intel® Pentium® G3320TE (3M Cache, 2.3 GHz); 35W
    - : Intel® Celeron® G1820TE (2M Cache, 2.2 GHz); 35W
- CPU - fan
  - 4th Generation Intel® Core™ processors (22nm process technology)
    - : Intel® Core™ i7-4790S (8M Cache, up to 4.0 GHz); 65W
    - : Intel® Core™ i7-4770S (8M Cache, up to 3.9 GHz); 65W
    - : Intel® Core™ i5-4590S (6M Cache, up to 3.7 GHz); 65W
    - : Intel® Core™ i5-4570S (6M Cache, up to 3.6 GHz); 65W
    - : Intel® Core™ i3-4360 (4M Cache, 3.7 GHz); 54W
    - : Intel® Core™ i3-4330 (4M Cache, 3.5 GHz); 54W
    - : Intel® Pentium® G3420 (3M Cache, 3.2 GHz); 53W
    - : Intel® Celeron® G1820 (2M Cache, 2.7 GHz); 53W
- Chipset: Intel® H81 Express Chipset

**MEMORY**

- Two 204-pin DDR3 SODIMM sockets
- Supports DDR3 1333/1600MHz
- Supports up to 16GB system memory
- Supports dual channel memory interface

**GRAPHICS**

- Intel® HD Graphics
- Display ports: 1 VGA, 1 DVI-D, 1 DP
- VGA: 24-bit, resolution up to 1920x1200 @ 60Hz
- DVI-D: resolution up to 1920x1200 @ 60Hz
- DP: resolution up to 3200x2000 @ 60Hz
- HDMI: 1.4a, resolution up to 4096x2304 @ 24Hz

**STORAGE**

- 2 2.5" SATA drive bays
  - SATA 3.0 port with data transfer rate up to 6Gb/s
- 1 CFast socket
- Supports 1 mSATA module via the mini PCIe socket

**ETHERNET**

- Intel® I210 PCI Express Gigabit Ethernet controller
- Intel® I217 Gigabit Ethernet Phy
- Integrated 10/100/1000 transceiver
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab

**AUDIO**

- Realtek ALC886 5.1-channel High Definition Audio
- S/PDIF audio interface

**EXPANSION**

- 1 PCIe x16 slot
- 3 PCI slots
- 1 Mini PCIe slot
  - Supports USB and PCIe signals
  - Supports mSATA, Wi-Fi or 3G\*
  - Supports half size or full size Mini PCIe card

**FRONT PANEL I/O PORTS**

- 1 power button with LED
- 1 reset button
- 1 status LED
- 1 HDD LED
- 1 VGA port
- 2 RJ45 LAN ports
- 4 Type A USB 2.0 ports
- 2 Type A USB 3.0 ports
- 6 DB-9 RS232/422/485 serial ports (with power)
- 1 9~36V DC-in 3-pole terminal block
- 1 8-bit DIO 9-pole terminal block
- Mic-in, Line-in, Line-out
- 1 DVI-D port
- 1 DP port

**POWER**

- Power input voltage: 9~36V DC-in

**COOLING SYSTEM**

- 2 system fan

**ENVIRONMENT**

- Temperature - fanless
  - Operating: 0°C ~ 45°C
- Temperature - fan
  - Operating: 0°C ~ 55°C (SSD/mSATA/CFast)
  - Operating: 0°C ~ 50°C (HDD)
  - Storage: -20°C ~ 85°C
  - Humidity: 5% ~ 90%
- Operating Vibration
  - IEC68-2-64
- Operating Shock
  - Half sine wave 3G, 11ms, 3 shock per axis

**CONSTRUCTION**

- Aluminum + SGCC

**MOUNTING**

- Wall mount
  - Mounting brackets and screws\*

**DIMENSIONS**

- 235mm x 208.2mm x 222mm (W x H x D)

**WEIGHT**

- 5.3kg

**OS SUPPORT**

- Windows XP (32-bit) (*limited function*)
- Windows 7, WES 7, Windows 8, WE8S
- Linux (Distribution available upon request)

**OTHER FEATURES**

- Watchdog timeout programmable via software from 1 to 255 seconds

**CERTIFICATION**

- CE
- FCC Class A
- RoHS

**DP Port**



Auto-detects DP and HDMI display

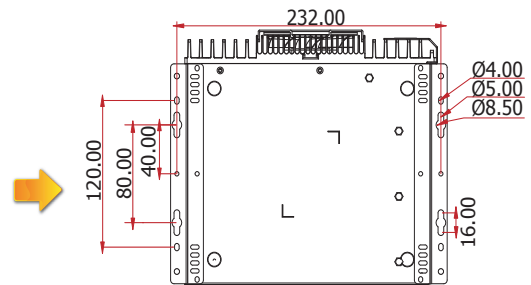
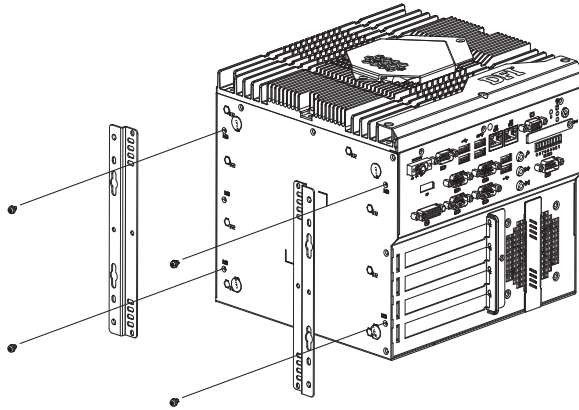


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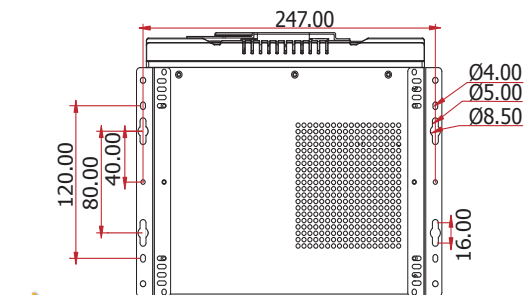
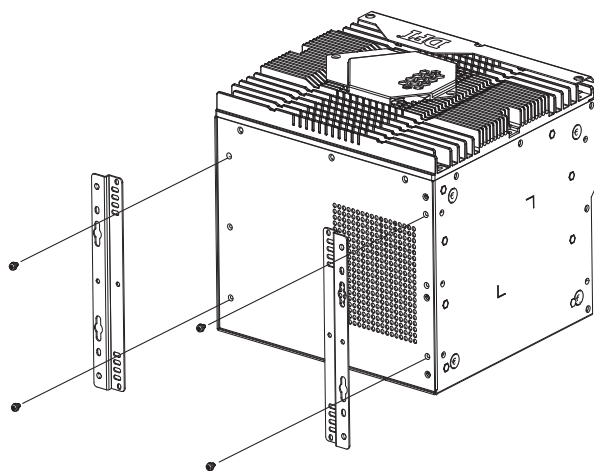
## EC541-HD

### Wall Mounting

#### Type 1



#### Type 2



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## EC541-HD

► **Ordering Information**

Model Name	Part Number	Description
EC541-HD6860	750-EC5410-000G	With fan, i7/i5/i3, H81, 6 COM, 6 USB, 8-bit DIO, 3 PCI, 1 PCIe x16, RoHS
	750-EC5410-100G	Fanless, i7/i5/i3, H81, 6 COM, 6 USB, 8-bit DIO, 3 PCI, 1 PCIe x16, RoHS

► **Optional Items**

Optional Items	Part Number	Description
<b>CPU</b>	785-1150DL	CPU, LGA1150, Long-Term Support, RoHS
<b>Memory</b>	785-RSOD38G-L	SODIMM, DDR3L Module (supports dual voltage 1.5V DDR3/1.35V DDR3L), 8GB, RoHS
	785-RSOD34G-L	SODIMM, DDR3L Module (supports dual voltage 1.5V DDR3/1.35V DDR3L), 4GB, RoHS
	785-RSOD32G-L	SODIMM, DDR3L Module (supports dual voltage 1.5V DDR3/1.35V DDR3L), 2GB, RoHS
<b>HDD</b>	785-H25500G	2.5" SATA HDD, 500GB, RoHS
	785-H25320G	2.5" SATA HDD, 320GB, RoHS
	785-S251TBG	2.5" SATA SSD, 1TB MLC, RoHS
	785-S25512G	2.5" SATA SSD, 512GB MLC, RoHS
	785-S25256G	2.5" SATA SSD, 256GB MLC, RoHS
	785-S25128G	2.5" SATA SSD, 128GB MLC, RoHS
	785-S25064G	2.5" SATA SSD, 64GB MLC, RoHS
<b>mSATA</b>	785-MS128GMF	mSATA Card, 128GB MLC, RoHS
	785-MS64GMF	mSATA Card, 64GB MLC, RoHS
	785-MS32GMF	mSATA Card, 32GB MLC, RoHS
	785-MS16GMF	mSATA Card, 16GB MLC, RoHS
	785-MS08GMF	mSATA Card, 8GB MLC, RoHS
	785-MS04GMF	mSATA Card, 4GB MLC, RoHS
<b>Wi-Fi</b>	761-110091-000G	Wi-Fi Kit, RoHS
<b>Power Cord</b>	785-PWRD	Power Cord, Standards (USA/EUR/CH), 1.8m, RoHS
<b>Power Adapter</b>	671-110003-100G	120W, 19V/6.31A, Level 6, RoHS
<b>Wall Mount</b>	761-EC5410-000G	Wall Mount Kit, RoHS

► **Packing List**

- 1 EC541 system unit

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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