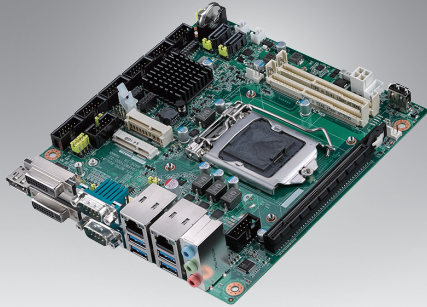


DPX[®]-E250

Intel[®] Core[™] i7/i5/i3 LGA 1150 Mini-ITX
with Dual DVI/DP++/LVDS, 6 COM,
Dual LAN, PCIe x16, 12VDC or ATX

Preliminary



Features

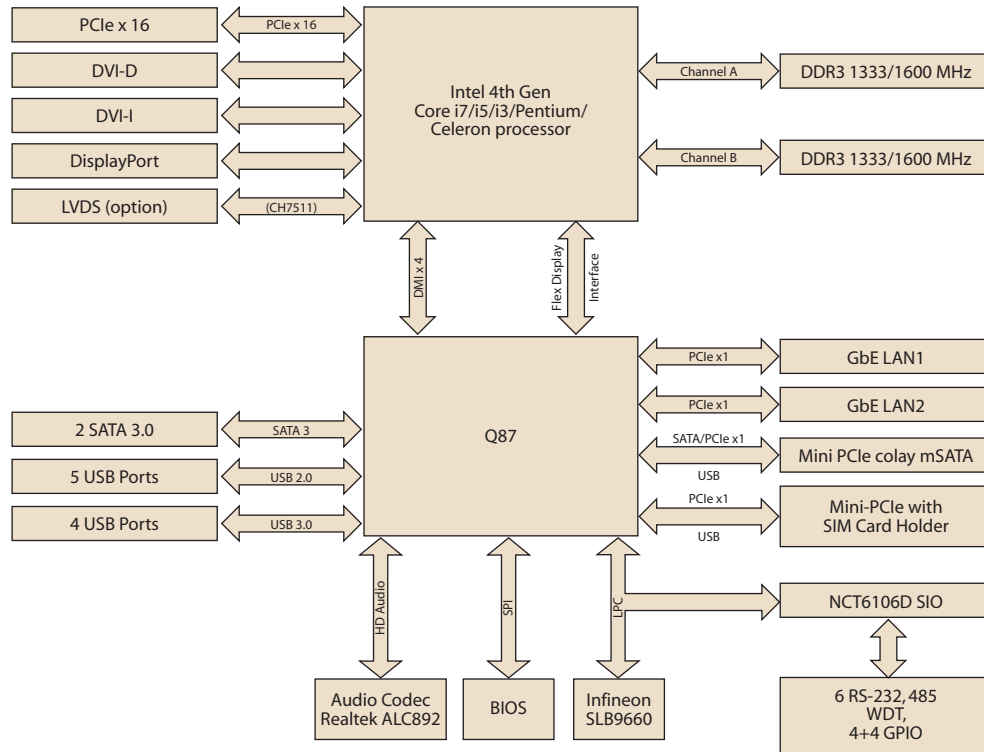
- Supports Intel[®] 4th Gen Core[™] i processor (LGA1150)
- Two 204-pin SO-DIMM up to 16 GB DDR3 1333/1600 MHz SDRAM
- Supports triple display of DVI-D/DVI-I/DP/LVDS
- Supports PCIe x16 (Gen 3) and two mini-PCIe
- Gaming compliant BIOS module
- 6 COM ports



Specifications

	CPU	i7-4790S	i7-4770S	i7-4770TE	i5-4590S/ 4590T	i5-4570S	i5-4570TE	i3-4360/ 4350T/ 4340TE	i3-4330	i3-4330TE	Pentium G3420	Pentium G3320TE
Processor System	Core Number	4	4	4	4/4	4	2	2/2/2	2	2	2	2
	Max Speed	3.2GHz	3.1 GHz	2.3 GHz	3.0/2.0 GHz	2.9 GHz	2.7 GHz	3.7/ 3.1/ 2.6 GHz	3.5 GHz	2.4 GHz	3.2 GHz	2.3 GHz
	L3 Cache	8M	8M	8M	6M/6M	6M	4M	4M/ 4M/ 4M	4M	4M	3M	3M
	TDP (W)	65W	65W	45W	65W/35W	65W	35W	54W/ 35W/ 35W	54W	35W	54W	35W
	Chipset	Q87										
	BIOS	AMI EFI 128 Mbit SPI										
Expansion Slot	PCI	-										
	Mini-PCIe	2, Top side x 2 support mini-PCIe/mSATA,										
	SIM card	Rear side x 1 SIM card holder										
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot										
Memory	Technology	Dual Channel DDR3 @ 1.5V 1333/1600 MHz SDRAM										
	Max. Capacity	16 GB/ 8 GB per SO-DIMM										
	Socket	2 x 204 PIN DDR3 SO-DIMM (Non-ECC)										
Graphics	Controller	Supports DirectX11.1, OpenGL 4.0 and OpenCL 1.2										
	VRAM	Shared system memory, 2 GB and above, total system memory shared 1 GB maximum video memory										
	VGA	Yes, supports max. resolution 1920 x 1200 @ 60 Hz, via DVI-I port										
	DVI-D	Yes, two ports supports max. resolution 1920 x 1200 @ 60Hz										
	Display Port 1.2	Yes, supports max. resolution 3840 x 2160 @ 60 Hz										
	LVDS	Option, Supports dual channel 48-bit up to 1920 x 1200										
	Triple/Dual Display	DVI+DVI+DP; VGA+DVI+DP; VGA+DVI+DVI, DVI+DVI+LVDS, VGA+DVI+LVDS, DVI+DP+LVDS										
Ethernet	Interface	10/100/1000 Mbps										
	Controller	GbE LAN1, LAN2 (PXE boot supported, but can disable in BIOS)										
	Connector	RJ-45 x 2										
SATA	Max Data Transfer Rate	600 MB/s (SATA 3.0)										
	Channel	2, Option for RAID 0,1										
Rear I/O	DVI-I	1										
	DVI-D	1										
	Display Port 1.2	1										
	Ethernet	2										
	USB	4 USB 3.0/2.0 (BIOS – can disable bootable USB)										
	Audio	3 audio jack (Mic-in, Line-out (L,R), Line-in(L,R))										
	Serial	2 (RS-232 full signal, supports 9 bit data)										
Internal Connector	USB	5 (USB 2.0) - 2x pin header (2 ports each), 1x vertical USB type A connector for USB dongle										
	Serial	4 (2 RS-232 (TX/RX/CTS/RTS), 1 RS-232 (full signal), 1 RS232/RS485))										
	SATA	2 (SATA 3.0), 2x SATA power 2 pin header										
	Mini-PCIe	2 (1 full size mini-PCIe/mSATA & 1 half size both with USB)										
	SIM card	1 on rear side										
	LPC	1 pin header LPC bus										
	Audio	1 header -, line out (L, R), mic in, line in (L, R)										
	LVDS (option)	1 header										
	DC Power	4 pin power header, plus 4 pin ATX control signal header										
	GPIO	8-bit (4 inputs, 4 outputs @4mA), LPC										
Watchdog Timer	Output	System reset										
	Interval	Programmable 1 ~ 255 sec/min										
Security	TPM (standard)	Infineon SLB9660 (soldered)										
Power Requirements	Input power	12 VDC single rail, or ATX										
Environment	Temperature	Operating: 0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution						Non-Operating: -40 ~ 85° C (-40 ~ 185° F)				
Physical Characteristics	Dimensions	"Modified Mini-ITX" - 170 mm x 185 mm (6.69" x 7.28"). Standard width, mounting holes, I/O plate and slot locations. Extended length.										

Block Diagram



Ordering Information

P/N	Chipset	DP	DVI-I	DVI-D	LVDS	GbE LAN	COM	SATA	USB 3.0/2.0	MiniPCle	TPM	PClex16
DPX-E250	Q87	1	1	1	(1)	2	6	2	4/6	2	1	1

*() BOM options available

Optional Chassis

Part Number	Description
AIMB-B2000-15ZE	Mini-ITX chassis with 150W power supply

I/O View



Optional Accessories

Part Number	Description
1703100121	USB cable with two ports, 12 cm
1703100261	USB cable with two ports, 26 cm
1703100350	USB cable with two ports, 34.5 cm
1703060191	KB/MS cable 1*6P-2.0/M-DIN 6P(F)*2, 19cm
1960053207N001	LGA1150 CPU cooler for CPU TDP 65W
1960060732N001	LGA1150 CPU cooler for CPU TDP 45W

Embedded OS

OS/API	Part No.	Description
WES7	2070012179	WES7E AIMB-274 x86 V5.1.6 Eng/Jpn/Chn
WES8	2070012425	WES8E AIMB-274 x86 V6.0.0 Eng