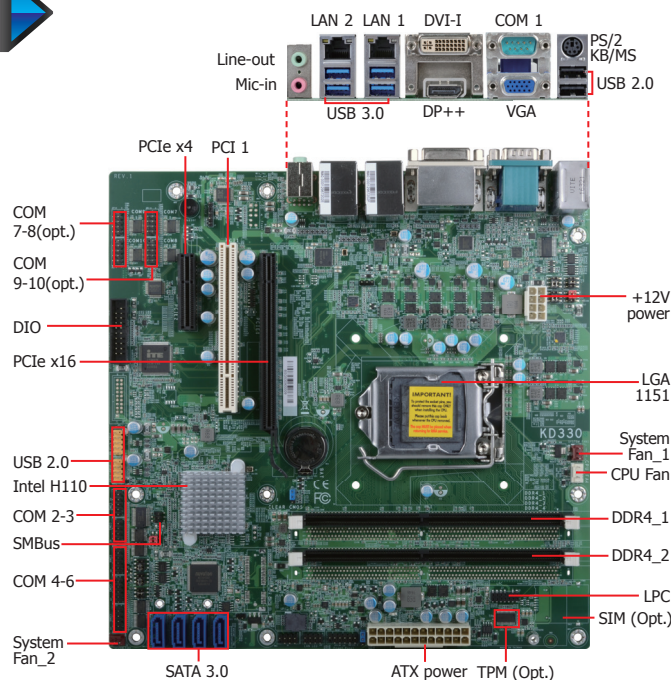


KD330-H110

Desktop

H110



Features

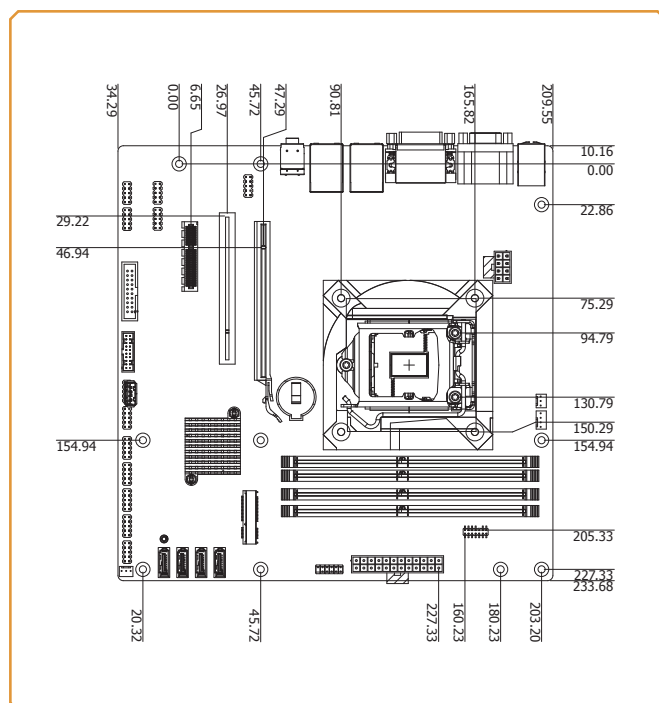
- 2 DDR4 DIMM up to 32GB
- Three display ports: VGA, DVI-D, DP++ Supports three independent displays
- DP++ resolution up to 4096x2304 @ 60Hz
DVI-D resolution up to 1920x1200 @ 60Hz
- Multiple expansion: 1 PCIe x16, 1 PCIe x4, 1 PCI
- Rich I/O: 2 Intel GbE, 6 COM(default), 4 COM(opt.), 4 USB 3.0, 6 USB 2.0



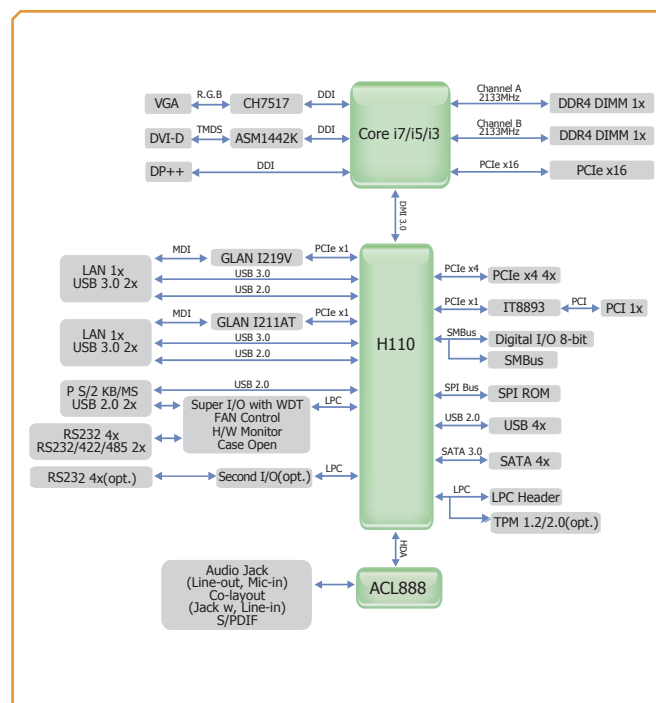
Ordering Information

Model Name	P/N	Memory	GbE	RS-232/422/485	RS-232	USB 3.0	USB 2.0	Power	Thermal	Temp.
KD330-H110	770-KD3301-000G	2 DIMM	2	2	8	4	6	24-pin ATX / 8-pin ATX 12V	Active	0 to 60°C

Mechanical Drawing



Block Diagram



Specifications

SYSTEM	Processor	6th/7th Generation Intel® Core™ /Pentium®/Celeron® LGA 1151 Socket Processors with TDP up to 65W
	Chipset	Intel® H110 Chipset
	Memory	Two 288-pin DIMM up to 32GB Dual Channel DDR4 2133/2400MHz
	BIOS	Insyde SPI 128Mbit
GRAPHICS	Controller	Intel® HD Gen 9 Graphics
	Feature	OpenGL 5.0, DirectX 12, OpenCL 2.1 HW Decode: AVC/H.264, MPEG2, VC1/WMV9, JPEG/MJPEG, HEVC/H265, VP8, VP9 HW Encode: MPEG2, AVC/H264, JPEG, HEVC/H265, VP8, VP9
	Display	1 x VGA 1 x DVI-I (DVI-D signal) 1 x DP++ VGA: resolution up to 1920x1200 @ 60Hz DVI-D: resolution up to 1920x1200 @ 60Hz DP++: resolution up to 4096x2304 @ 60Hz
	Triple Displays	VGA + DVI-D + DP++
EXPANSION	Interface	1 x PCIe x16 (Gen 3) 1 x PCIe x4 (Gen 2) 1 x PCI
AUDIO	Audio Codec	Realtek ALC888S-VD2-GR
ETHERNET	Controller	1 x Intel® I211AT PCIe (10/100/1000Mbps) 1 x Intel® I219V PCIe (10/100/1000Mbps)
REAR I/O	Ethernet	2 x GbE (RJ-45)
	USB	4 x USB 3.0 2 x USB 2.0
	Serial	1 x RS-232/422/485 (RS-232 w/ power) (DB-9)
	PS/2	1 x PS/2 (mini-DIN-6)
	Display	1 x VGA 1 x DVI-I (DVI-D signal) 1 x DP++
	Audio	1 x Line-out 1 x Mic-in
	Internal I/O	1 x RS-232/422/485 (RS-232 w/ power) (2.54mm pitch) 4 x RS-232 (default), 4 x RS-232 (available upon request)
INTERNAL I/O	USB	4 x USB 2.0 (2.54mm pitch)
	Audio	1 x S/PDIF
	SATA	4 x SATA 3.0 (up to 6Gb/s)
	DIO	1 x 8-bit DIO
	LPC	1 x LPC
	SMBus	1 x SMBus
	WATCHDOG TIMER	Output & Interval System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	TPM	Infineon TPM2.0/1.2 (optional)
POWER	Type	ATX
	Connector	8-pin ATX 12V power 24-pin ATX power
	Consumption	Typical: i7 65W: 12V @ 1.22A (14.64 Watt) Max.: i7 65W: 12V @ 6.92A (83.04 Watt)
	RTC Battery	CR2032 Coin Cell
	OS SUPPORT	Windows 10 IoT Enterprise 64-bit
ENVIRONMENT	Temperature	Operating: 0 to 60°C Storage: -40 to 85°C
	Humidity	Operating: 5 to 90% RH Storage: 5 to 90% RH
	MTBF	392,639 hrs @ 25°C; 227,309 hrs @ 45°C; 144,160 hrs @ 60°C Calculation Model: Telcordia Issue 2 Environment: GB, GC – Ground Benign, Controlled
	MECHANICAL	Dimensions microATX form factor 244mm (9.6") x 244mm (9.6") Height PCB: TBD Top Side: TBD, Bottom Side: TBD
CERTIFICATIONS		CE, FCC

Packing List

• 1 KD330-H110 motherboard	
• 1 COM port cable (Length: 300mm, 2 x COM ports)	A81-015026-023G
• 1 Serial ATA data cable (Length: 500mm)	332-553001-005G
• 1 I/O shield	A49-SD3300-001G
• 1 DVD	643-KD3301-000G

Optional Items

• USB 2.0 port cable (Length: 350/398mm)	332-253010-026G
• USB 3.0 port cable (Length: 320mm)	A81-001052-023G
• D-SUB cable (Length: 300mm, 2 DB9)	A81-015026-023G
• Serial ATA data cable (Length: 500mm)	332-553001-005G
• Thermal solution (For 35W, Height: 37.3mm)	A71-103004-000G
• Thermal solution (For 65W, Height: 72.8mm)	552-200049-000G