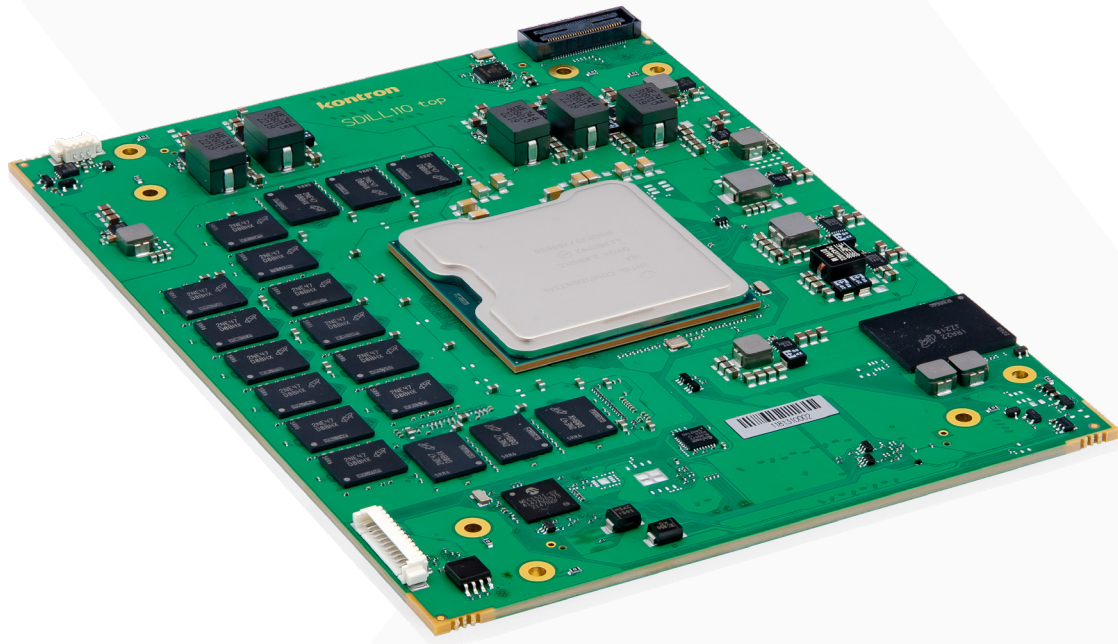


COMh-sdIL (E2)



COM-HPC®/Server Size D small with Intel® Xeon® D-1700 / D-1800 SOC processors

- Server-grade platform
- 8x LAN Ports: versatile configurations up to 100G
- High-speed connectivity 16x PCIe 4.0 + 16x PCIe 3.0, SATA, USB 3.0
- Up to 1 TByte NVMe SSD onboard
- Industrial grade versions

COMPLIANCE	COM-HPC®/Server, Size D small
DIMENSIONS	120 x 160 mm
CPU (SoC)	Intel Xeon® D-1700 /D-1800 Processor Series For details see table "CPU variants" given below
CHIPSET	-
MAIN MEMORY	Up to 64GB DDR4-2667 soldered memory - ECC, extended temp
ETHERNET CONTROLLER	Intel® I226-LM/IT Intel® 2x Quad 25GbE LAN integrated in SoC
ETHERNET	1x 1/2.5 Gb Ethernet 8x Ethernet ports supporting versatile configurations: 100GbE/2x 50GbE/4x 25GbE/2x 25GbE + 4x 10GbE/8x 10GbE
STORAGE	2x SATA 6Gb/s
FLASH ONBOARD	Up to 1 TByte NVMe SSD (on request)
PCI EXPRESS®	16x PCIe Gen4 (1 x16, 2 x8, 4 x4) 16x PCIe Gen3 (2 x8, 4 x4, 8 x2)
USB	4x USB 3.0 / USB 2.0
SERIAL	2x serial interface (RX/TX only)
OTHER FEATURES	SPI, eSPI, SMB, Staged Watchdog, RTC
SPECIAL FEATURES	TPM 2.0
FEATURES ON REQUEST	NVMe SSD, 1x PCIe for BMC instead of USB3.0 #3
POWER MANAGEMENT	ACPI 6.0
POWER SUPPLY	12V DC
BIOS	AMI UEFI
OPERATING SYSTEM	Linux, Windows 10 IoT Enterprise, Windows Server 2022
TEMPERATURE	Commercial temperature: 0 °C to +60 °C operating, -30 °C to +85 °C non-operating Industrial temperature: -40 °C to +85 °C operating, -40 °C to +85 °C non-operating
HUMIDITY	93 % relative Humidity at 40 °C, non-condensing (according to IEC 60068-2-78)
SUPPORTED MODULES	COMh-sdIL xxxxx commercial grade COMh-sdIL (E2) xxxxx industrial grade

CPU Variants

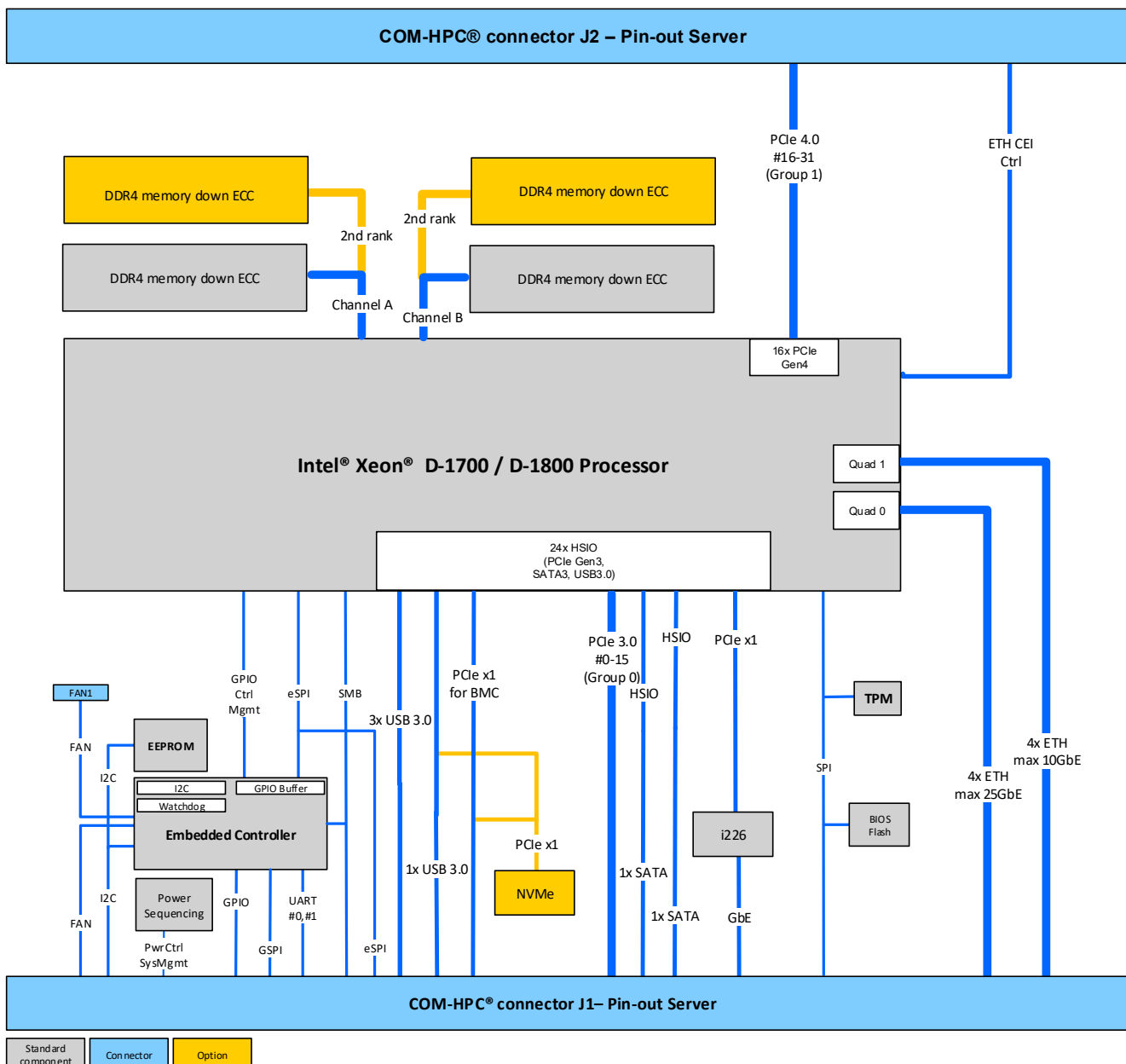
CPU	STD FOR COMh-sdIL	GROUP	TDP	NO. OF CORES	IOTG	Ex-tend. Temp	DDR4 Freq (MT/s)	BASE FREQ (GHZ)	ALL/MAX TURBO (GHZ)	LAN BANDWIDTH (GBE)	QAT BANDWIDTH (GBE)
D-1746TER	standard	NIC	67/56	10	Yes	Yes	2667	2.0	2.5/3.1	100G	OFF
D-1848TER	on request	NIC	57	10	Yes	Yes	2667	2.0	2.5/3.1	100G	OFF
D-1749NT	on request	QAT	90	10	No	No	2667	3.0	3.5/3.5	100G	20G
D-1748TE	on request	NIC	65	10	No	Yes	2400	2.3	2.8/3.4	50G	OFF
D-1747NTE	on request	QAT	80	10	No	Yes	2933	2.5	3.0/3.5	100G	20G
D-1844NT	on request	QAT	55	10	No	No	2667	2.0	2.6/3.1	50G	20G
D-1735TR	on request	NIC	59	8	Yes	No	2933	2.2	2.7/3.4	50G	OFF
D-1732TE	standard	NIC	52	8	Yes	Yes	2667	1.9	2.4/3.0	50G	OFF
D-1734NT	on request	QAT	50	8	No	No	2667	2.0	2.5/3.1	50G	20G
D-1736NT	on request	QAT	67	8	No	No	2667	2.7	3.2/3.5	50G	20G
D-1733NT	on request	QAT	53	8	No	No	2400	2.0	2.5/3.1	50G	20G
D-1823NT	on request	QAT	55	6	No	No	2400	2.8	3.3/3.5	50G	10G
D-1715TER	standard	NIC	50	4	Yes	Yes	2667	2.4	2.9/3.5	50G	OFF
D-1712TR	on request	NIC	40	4	Yes	No	2400	2.0	2.5/3.1	50G	OFF
D-1718T	on request	NIC	46	4	No	No	2933	2.6	3.1/3.5	50G	OFF
D-1713NT	on request	QAT	45	4	No	No	2400	2.2	2.9/3.5	50G	10G
D-1713NTE	on request	QAT	45	4	No	Yes	2400	2.2	2.7/3.3	50G	10G
D-1813NT	on request	QAT	42	4	No	No	2400	2.2	2.4/2.4	50G	10G
D-1846	on request	No LAN	55	10	No	No	2933	2.0	2.6/3.1	0G	OFF
D-1739	on request	No LAN	83	8	No	No	2933	3.0	3.5/3.5	0G	OFF

Please contact your sales representative for other CPU versions or LAN configurations
Please contact tech support for custom UEFI firmware

CPU	STD FOR COMh-sdIL	GROUP	TDP	NO. OF CORES	IOTG	Ex-tend. Temp	DDR4 Freq (MT/s)	BASE FREQ (GHZ)	ALL/MAX TURBO (GHZ)	LAN BAND-WIDTH (GBE)	QAT BAND-WIDTH (GBE)
D-1736	on request	No LAN	55	8	No	No	2933	2.3	2.8/3.4	0G	OFF
D-1834	on request	No LAN	42	8	No	No	2667	1,8	2,4/2,9	0G	OFF
D-1726	on request	No LAN	70	6	No	No	2933	2.9	3.4/3.5	0G	OFF
D-1722NE	on request	No LAN	36	6	No	Yes	2400	1.7	2.1/2.7	0G	10G
D-1714	on request	No LAN	38	4	No	No	2667	2.3	2.8/3.4	0G	OFF
D1702	on request	No LAN	25	2	No	No	2400	1.6	1.7/1.7	0G	OFF

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Block Diagram



PART NO.	CPU	1/2.5 GbE	MEMORY	SOC-LAN	LEK	NVMe	OP. TEMPERATURE
HSD04-6400-46-1	D-1746TER	i226-IT	64 GByte ECC	4x 25G-KR	7.6	no	-40 °C to +85 °C
HSD04-3200-32-1	D-1732TE	i226-IT	32 GByte ECC	5x 10G-KR	7.6	no	-40 °C to +85 °C
HSD04-1600-15-1	D-1715TER	i226-IT	16 GByte ECC	5x 10G-KR	7.6	no	-40 °C to +85 °C

Carrier

ARTICLE	PART NO.	DESCRIPTION
COM-HPC/SERVER EVAL-CARRIER	HST01-0000-10-0	Evaluation Carrier with 10-mm stack-up connector
COM-HPC/SERVER REF-CARRIER	HSR01-0000-05-0	Application Reference Carrier with 5-mm stack-up connector

Cooling

ARTICLE	PART NO.	DESCRIPTION
COMh-sdIL (E2) HSP THREADED	HSD04-0000-99-0	COMh-sdIL (E2) heatspreader threaded
COMh-sdIL (E2) HSP THROUGH HOLE	HSD04-0000-99-1	COMh-sdIL (E2) heatspreader through hole
COMh SIZE D ACTIVE UNI COOLER (W/O HSP)	HSD99-0000-99-0	COM-HPC Size D Universal Active Cooler for Heatspreader Mounting (160 x 100 x 46 mm)
COMh SIZE D PASSIVE UNI COOLER (W/O HSP)	HSD99-0000-99-1	COM-HPC Size D Universal Passive Cooler for Heatspreader Mounting (160 x 100 x 46 mm)

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