intel

Intel Atom x6425RE processor 1.9 GHz 1.5 MB L2

Brand : Intel

Product family: Atom

Product code:
FH8070304289558

Product name : Intel Atom®
x6425RE Processor (1.5M Cache,
1.90 GHz)

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ATOM

intel ATOM inside

Intel Atom x6425RE Processor 1.5M Cache 1.90 GHz
Intel Atom x6425RE. Processor family: Intel Atom®, Processor socket: BGA 1493, Processor lithography: 10 nm. Memory channels: Quad-channel, Memory bandwidth (max): 68.2 GB/s. On-board graphics card model: Intel® UHD Graphics, On-board graphics card outputs supported: Embedded DisplayPort (eDP), DisplayPort, HDMI, MIPI-DSI, On-board graphics card base frequency: 400 MHz. Market segment: Embedded, Use conditions: Industrial Extended Temp, Export Control Classification Number (ECCN): 5A992CN3. Processor package size: 35 x 24 mm

Processor

Processor manufacturer *	Intel
Processor model *	x6425RE
Processor base frequency *	1.9 GHz
Processor family *	Intel Atom®
Processor cores *	4
Processor socket *	BGA 1493
Processor lithography *	10 nm
Processor threads	4
Processor operating modes *	64-bit
Processor cache	1.5 MB
Processor cache type	L2
Thermal Design Power (TDP)	12 W
Box *	✘
Cooler included *	✘
Memory bandwidth supported by processor (max)	68.2 GB/s
Processor ARK ID	207899

Memory

Memory channels *	Quad-channel
ECC	✘
Memory bandwidth (max)	68.2 GB/s

Graphics

On-board graphics card *	✔
Discrete graphics card *	✘
On-board graphics card model *	Intel® UHD Graphics
On-board graphics card outputs supported	Embedded DisplayPort (eDP), DisplayPort, HDMI, MIPI-DSI
On-board graphics card base frequency	400 MHz
On-board graphics card 4K support	✔
On-board graphics card refresh rate at maximum resolution (DisplayPort)	60 Hz
On-board graphics card refresh rate at maximum resolution (eDP - Integrated Flat Panel)	60 Hz
Discrete graphics card model *	Not available
Number of execution units	32

Features

Execute Disable Bit	✔
Idle States	✔
Market segment	Embedded

Features

Commodity Classification Automated Tracking System (CCATS)	G179048

I/O configuration

USB ports quantity	4
Total number of SATA connectors	2
General Purpose IO	Yes

Processor special features

Intel® Hyper Threading Technology (Intel® HT Technology)	✘
Intel® Quick Sync Video Technology	✔
Intel® AES New Instructions (Intel® AES-NI)	✔
Intel Trusted Execution Technology	✘
Intel® Speed Shift Technology	✘
Intel® Time Coordinated Computing (Intel® TCC)	✔
Intel® Secure Key	✔
Intel® High Definition Audio (Intel® HD Audio)	✔
Intel® OS Guard	✔
Intel Secure Boot	✔
Intel 64	✔
Intel Virtualization Technology (VT-x)	✔
Intel Virtualization Technology for Directed I/O (VT-d)	✔
Intel® Boot Guard	✔
Intel® vPro™ Platform Eligibility	✘

Operational conditions

Minimum operating temperature	-40 °C
Operating temperature (T-T)	-40 - 85 °C
Maximum operating temperature	85 °C
Tjunction	110 °C

Logistics data

Harmonized System (HS) code	8542310001

Technical details

Launch date	Q1'21
Status	Launched

Weight & dimensions

Processor package size	35 x 24 mm

Features		Other features	
Use conditions	Industrial Extended Temp	Maximum internal memory	32 GB
Maximum number of PCI Express lanes	8		
PCI Express slots version	3.0		
CPU configuration (max)	1		
Export Control Classification Number (ECCN)	5A992CN3		

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