Intel® Atom™ Processor C2518 (2M Cache, 1.70 GHz)

Specifications		
- Essentials		
Status	Launched	
Launch Date	Q3'13	
Processor Number	C2518	
Cache	2 MB	
Instruction Set	64-bit	
Embedded Options Available	Yes	
Lithography	22 nm	
Recommended Customer Price	TRAY: \$91.00	
- Performance		
# of Cores	4	
# of Threads	4	
Processor Base Frequency	1.7 GHz	
TDP	13 W	
- Memory Specifications		
Max Memory Size (dependent on memory type)	32 GB	
Memory Types	DDR3/DDR3L 1333	
Max # of Memory Channels	2	
Physical Address Extensions	36-bit	
ECC Memory Supported [‡]	Yes	
- Expansion Options		
PCI Express Revision	2	
PCI Express Configurations ‡	x1,x2,x4,x8,x16	
Max # of PCI Express Lanes	16	
- I/O Specifications		
USB Revision	2	
# of USB Ports	4	
Total # of SATA Ports	6	
Integrated LAN	4x1 or 4x2.5 GbE	
UART	2 Interfaces	
Max # of SATA 6.0 Gb/s Ports	2	

- Package Specifications					
Package Size	34 mm x 28 mm				
Sockets Supported	FCBGA1283				
Low Halogen Options Available	See MDDS				
- Advanced Technologies					
Intel® Turbo Boost Technology ‡	No				
Intel® Hyper-Threading Technology ‡	No				
Intel® Virtualization Technology (VT-x) ‡	Yes				
Intel® VT-x with Extended Page Tables (EPT) ‡	Yes				
Intel® 64 [‡]	Yes				
Intel® QuickAssist Technology	Yes				
- Intel® Data Protection Technology					
Intel® AES New Instructions	Yes				
- Intel® Platform Protection Technology					
Execute Disable Bit ‡	Yes				

Ordering and Spec Information

Trade Compliance Information

ECCN	CCATS	US HTS
5A002R	G143816	8542310000-HYBRD

Ordering and Spec Information

Spec Code	Ordering Code	Step	RCP			
Intel® Atom™ Processor C2518 (2M Cache, 1.70 GHz) FC-BGA13E, Tray						
SR1D1	FH8065501516710	во	\$91.00			

Download Drivers

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Refer to Datasheet for formal definitions of product properties and features.

"Announced" SKUs are not yet available. Please refer to the Launch Date for market availability.

Some products can support AES New Instructions with a Processor Configuration update, in particular, i7-2630QM/i7-2635QM, i7-2670QM/i7-2675QM, i5-2430M/i5-2435M, i5-2410M/i5-2415M. Please contact OEM for the BIOS that includes the latest Processor configuration update.

‡ This feature may not be available on all computing systems. Please check with the system vendor to determine if your system delivers this feature, or reference the system specifications (motherboard, processor, chipset, power supply, HDD, graphics controller, memory, BIOS, drivers, virtual machine monitor-VMM, platform software, and/or operating system) for feature compatibility. Functionality, performance, and other benefits of this feature may vary depending on system configuration.

"Conflict free" and "conflict-free" means "DRC conflict free", which is defined by the U.S. Securities and Exchange Commission rules to mean products that do not contain conflict minerals (tin,

tantalum, tungsten and/or gold) that directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo (DRC) or adjoining countries. Intel also uses the term "conflict-free" in a broader sense to refer to suppliers, supply chains, smelters and refiners whose sources of conflict minerals do not finance conflict in the DRC or adjoining countries. Intel processors manufactured before January 1, 2013 are not confirmed conflict free. The conflict free designation refers only to product manufactured after that date. For Intel Boxed Processors, the conflict free designation refers to the processor only, not to any additional included accessories, such as heatisinks/coolers.

See http://www.intel.com/content/www/us/en/architecture-and-technology/hyper-threading/hyper-threading-technology.html?wapkw=hyper+threading for more information including details on which processors support Intel® HT Technology.

Max Turbo Frequency refers to the maximum single-core processor frequency that can be achieved with Intel® Turbo Boost Technology. See www.intel.com/technology/turboboost/ for more information

The Recommended Customer Price ("RCP") is pricing guidance for Intel products. Prices are for direct Intel customers, typically represent 1,000-unit purchase quantities, and are subject to change without notice. Taxes and shipping, etc. not included. Prices may vary for other package types and shipment quantities, and special promotional arrangements may apply. If sold in bulk, price represents individual unit. Listing of these RCP does not constitute a formal pricing offer from Intel. Please work with your appropriate Intel representative to obtain a formal price quotation.

System and Maximum TDP is based on worst case scenarios. Actual TDP may be lower if not all I/Os for chipsets are used.

Low Halogen: Applies only to brominated and chlorinated flame retardants (BFRs/CFRs) and PVC in the final product. Intel components as well as purchased components on the finished assembly meet JS-709 requirements, and the PCB / substrate meet IEC 61249-2-21 requirements. The replacement of halogenated flame retardants and/or PVC may not be better for the environment.

For benchmarking data see http://www.intel.com/performance.

Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See http://www.intel.com/content/www/us/en/processors/processor-numbers.html for details.

Processors that support 64-bit computing on Intel® architecture require an Intel 64 architecture-enabled BIOS.

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