

HP Intel Core i5-4310M processor 2.7 GHz 3 MB Smart Cache

Brand: HP Product code: 765143-001

Product name: Intel Core i5-4310M

Intel Core i5-4310M, 3M Cache, 2.7 GHz, 5 GT/s DMI2

HP Intel Core i5-4310M processor 2.7 GHz 3 MB Smart Cache:

Options, accessories, services and support for all your HP and Compaq products. HP Intel Core i5-4310M. Processor family: Intel® Core™ i5, Processor lithography: 22 nm, Processor model: i5-4310M. Memory channels: Dual-channel, Maximum internal memory supported by processor: 32 GB, Memory types supported by processor: DDR3L-SDRAM. On-board graphics card model: Intel® HD Graphics 4600, Maximum on-board graphics card memory: 2 GB, On-board graphics card outputs supported: DisplayPort, Embedded DisplayPort (eDP), HDMI. Market segment: Mobile, PCI Express configurations: 1x16, 1x8+2x4, 2x8, Supported instruction sets: AVX 2.0, SSE4.1, SSE4.2. Compatibility: ProBook 650 G1

Processor		Graphics	
Processor generation	4th gen Intel® Core™ i5	On-board graphics card refresh rate	60 Hz
Processor model *	i5-4310M	at maximum resolution (HDMI)	
Processor base frequency *	2.7 GHz	On-board graphics card refresh rate at maximum resolution (VGA)	60 Hz
Processor family *	Intel® Core™ i5	, ,	
Processor cores *	2	Features	
Component for	Laptop	Execute Disable Bit	✓
Processor lithography *	22 nm	Thermal Monitoring Technologies	✓
Processor series	Intel Core i5-4300 Mobile series	Market segment	Mobile
Processor threads	4	Maximum number of PCI Express	16
System bus rate	5 GT/s	lanes	10
Processor operating modes *	64-bit	PCI Express slots version	3.0
Processor boost frequency	3.4 GHz	PCI Express configurations	1x16, 1x8+2x4, 2x8
Processor cache	3 MB	Supported instruction sets	AVX 2.0, SSE4.1, SSE4.2
Processor cache type	Smart Cache	CPU configuration (max)	1
Thermal Design Power (TDP)	37 W	Embedded options available	×
Bus type	DMI2	Processor special features	
Memory bandwidth supported by processor (max)	25.6 GB/s	Intel® Anti-Theft Technology	✓
Processor codename	Haswell	(Intel® AT)	
Memory		Intel® Hyper Threading Technology (Intel® HT Technology)	✓
Maximum internal memory supported by processor	32 GB	Intel® Identity Protection Technology (Intel® IPT)	✓
Memory types supported by	DDR3L-SDRAM	Intel® Turbo Boost Technology	2.0
processor	22.02.02.0	Intel® Quick Sync Video Technology	
Memory clock speeds supported by processor	1333,1600 MHz	Intel® InTru™ 3D Technology	✓
Memory channels *	Dual-channel	Intel® Wireless Display (Intel® WiDi)	✓
ECC	X	Intel® Clear Video HD Technology	√
Graphics		(Intel® CVT HD)	•
On-board graphics card *	1	Intel® Insider™	✓
On-board graphics card model *	Intel® HD Graphics 4600	Intel® AES New Instructions (Intel® AES-NI)	✓
Maximum on-board graphics card memory	2 GB	Enhanced Intel SpeedStep Technology	✓
On-board graphics card outputs supported	DisplayPort, Embedded DisplayPort (eDP), HDMI	Intel Trusted Execution Technology	✓
On-board graphics card base frequency	400 MHz	Intel VT-x with Extended Page Tables (EPT)	✓
On-board graphics card dynamic frequency (max)	1250 MHz	Intel® Secure Key	✓
		Intel TSX-NI	×
		Intel 64	✓

Graphics		Processor special features	
Number of displays supported (on- board graphics)	3	Intel Virtualization Technology (VT-x)	1
On-board graphics card DirectX version	11.2/12	Intel Virtualization Technology for Directed I/O (VT-d)	✓
On-board graphics card OpenGL	4.3	Conflict-Free processor	✓
version		Intel® vPro™ Platform Eligibility	✓
On-board graphics card maximum resolution (DisplayPort)	3840 x 2160 pixels	Operational conditions	
On-board graphics card maximum resolution (HDMI)	3840 x 2160 pixels	Tjunction	100 °C
On-board graphics card maximum	2880 x 1800 pixels	Other features	
resolution (VGA)		Compatibility	ProBook 650 G1
On-board graphics card refresh rate at maximum resolution (DisplayPort)	60 Hz	,	

