

## HP Intel Core i5-4210M processor 2.6 GHz 3 MB Smart Cache

Brand: HP Product code: 768420-001

Product name: Intel Core i5-4210M

Intel Core i5-4210M, 3M Cache, 2.6 GHz, 5 GT/s DMI2

HP Intel Core i5-4210M processor 2.6 GHz 3 MB Smart Cache:

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HP Intel Core i5-4210M. Processor family: Intel® Core™ i5, Processor socket: PGA946, Processor lithography: 22 nm. 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: ZBook 15 G2 ProBook 650 G1

Processor		Graphics	
Processor generation	4th gen Intel® Core™ i5	On-board graphics card refresh rate	60 Hz
Processor model *	i5-4210M	at maximum resolution (HDMI)	
Processor base frequency *	2.6 GHz	On-board graphics card refresh rate at maximum resolution (VGA)	60 Hz
Processor family *	Intel® Core™ i5	` '	
Processor cores *	2	Features	
Processor socket *	PGA946	Execute Disable Bit	✓
Component for	Laptop	Thermal Monitoring Technologies	✓
Processor lithography *	22 nm	Market segment	Mobile
Processor series	Intel Core i5-4200 Mobile series	Maximum number of PCI Express	16
Processor threads	4	lanes	
System bus rate	5 GT/s	PCI Express slots version	3.0
Processor operating modes *	64-bit	PCI Express configurations	1x16, 1x8+2x4, 2x8
Processor boost frequency	3.2 GHz	Supported instruction sets	AVX 2.0, SSE4.1, SSE4.2
Processor cache	3 MB	CPU configuration (max)	1
Processor cache type	Smart Cache	Embedded options available	×
Thermal Design Power (TDP)	37 W C0	Processor special features	
Stepping Bus type	DMI2	Intel® Anti-Theft Technology	/
Memory bandwidth supported by	DIVITZ	(Intel® AT)	•
processor (max)	25.6 GB/s	Intel® Hyper Threading Technology (Intel® HT Technology)	✓
Processor codename	Haswell	Intel® Identity Protection	/
Memory		Technology (Intel® IPT)	
Maximum internal memory	32 GB	Intel® Turbo Boost Technology	2.0
supported by processor	32 GB	Intel® Quick Sync Video Technology	✓ ·
Memory types supported by processor	DDR3L-SDRAM	Intel® InTru™ 3D Technology	✓
Memory clock speeds supported by processor	1333,1600 MHz	Intel® Wireless Display (Intel® WiDi)	✓
Memory channels *	Dual-channel	Intel® Clear Video HD Technology	<b>√</b>
ECC ECC	X	(Intel® CVT HD)	
	^	Intel® Insider™	<b>/</b>
Graphics		Intel® AES New Instructions (Intel® AES-NI)	✓
On-board graphics card *	✓	Enhanced Intel SpeedStep	_
On-board graphics card model *	Intel® HD Graphics 4600	Technology	<b>/</b>
Maximum on-board graphics card memory	2 GB	Intel Trusted Execution Technology	×
On-board graphics card outputs supported	DisplayPort, Embedded DisplayPort (eDP), HDMI	Intel VT-x with Extended Page Tables (EPT)	<b>/</b>
On-board graphics card base frequency	400 MHz	Intel® Secure Key	✓
		Intel TSX-NI	X
		Intel 64	✓

Graphics		Processor special features		
On-board graphics card dynamic frequency (max)	1150 MHz	Intel Virtualization Technology (VT-x)	1	
Number of displays supported (on- board graphics)	3	Intel Virtualization Technology for Directed I/O (VT-d)	×	
On-board graphics card DirectX	11.2/12 4.3	Conflict-Free processor	✓	
version		Intel® vPro™ Platform Eligibility	×	
On-board graphics card OpenGL version		Operational conditions		
On-board graphics card maximum resolution (DisplayPort)	3840 x 2160 pixels	Tjunction	100 °C	
On-board graphics card maximum resolution (HDMI)	3840 x 2160 pixels	Other features		
		Compatibility	ZBook 15 G2 ProBook 650 G1	
On-board graphics card maximum resolution (VGA)	2880 x 1800 pixels			
On-board graphics card refresh rate at maximum resolution (DisplayPort)	60 Hz			

