HP Intel Celeron G1830 processor 2.8 GHz 2 MB Smart Cache

Brand : HP

Product code: 758757-001

Product name : Intel Celeron G1830

Intel Celeron G1830 , 2M Cache, 2.8 GHz, 5 GT/s DMI2

HP Intel Celeron G1830 processor 2.8 GHz 2 MB Smart Cache:

Options, accessories, services and support for all your HP and Compaq products.
HP Intel Celeron G1830. Processor family: Intel® Celeron® G, Processor socket: LGA 1150 (Socket H3),
Processor lithography: 22 nm. Memory channels: Dual-channel, Maximum internal memory supported by
processor: 32 GB, Memory types supported by processor: DDR3-SDRAM, DDR3L. On-board graphics card
model: Intel® HD Graphics, Maximum on-board graphics card memory: 1.7 GB, On-board graphics card
outputs supported: DVI, DisplayPort, Embedded DisplayPort (eDP), HDMI, VGA (D-Sub). Market segment:
Desktop, PCI Express configurations: 1x16, 1x8+2x4, 2x8, Supported instruction sets: SSE4.1, SSE4.2.
Compatibility: EliteOne 800 G1

Processor

Processor model *	G1830
Processor base frequency *	2.8 GHz
Processor family *	Intel® Celeron® G
Processor cores *	2
Processor socket *	LGA 1150 (Socket H3)
Component for	PC
Processor lithography *	22 nm
Processor series	Intel Celeron Processor G1000 Series for Desktop
Processor threads	2
System bus rate	5 GT/s
Processor operating modes *	64-bit
Processor cache	2 MB
Processor cache type	Smart Cache
Thermal Design Power (TDP)	53 W
Stepping	C0
Bus type	DMI2
Memory bandwidth supported by processor (max)	21.3 GB/s

Memory

Maximum internal memory supported by processor	32 GB
Memory types supported by processor	DDR3-SDRAM, DDR3L
Memory clock speeds supported by processor	1333 MHz
Memory voltage supported by processor	1.5 V
Memory channels *	Dual-channel
ECC	✔

Graphics

On-board graphics card *	✔
On-board graphics card model *	Intel® HD Graphics
Maximum on-board graphics card memory	1.7 GB
On-board graphics card outputs supported	DVI, DisplayPort, Embedded DisplayPort (eDP), HDMI, VGA (D-Sub)
On-board graphics card base frequency	350 MHz

Graphics

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
On-board graphics card refresh rate at maximum resolution (HDMI)	60 Hz
On-board graphics card refresh rate at maximum resolution (VGA)	60 Hz

Features

Execute Disable Bit	✔
Idle States	✔
Thermal Monitoring Technologies	✔
Market segment	Desktop
Maximum number of PCI Express lanes	16
PCI Express slots version	3.0
PCI Express configurations	1x16, 1x8+2x4, 2x8
Supported instruction sets	SSE4.1, SSE4.2
Scalability	1S
CPU configuration (max)	1
Embedded options available	✘
Graphics & IMC lithography	22 nm
Thermal solution specification	PCG 2013C

Processor special features

Intel® Hyper Threading Technology (Intel® HT Technology)	✘
Intel® Turbo Boost Technology	✘
Intel® Quick Sync Video Technology	✔
Intel® AES New Instructions (Intel® AES-NI)	✘
Enhanced Intel SpeedStep Technology	✔
Intel Trusted Execution Technology	✘
Intel VT-x with Extended Page Tables (EPT)	✔
Intel® Secure Key	✔
Intel TSX-NI	✘

Graphics

On-board graphics card dynamic frequency (max)	1050 MHz
Number of displays supported (on-board graphics)	3
On-board graphics card DirectX version	11.1/12
On-board graphics card OpenGL version	4.3
On-board graphics card maximum resolution (DisplayPort)	2560 x 1600 pixels
On-board graphics card maximum resolution (eDP - Integrated Flat Panel)	2560 x 1600 pixels
On-board graphics card maximum resolution (HDMI)	1920 x 1080 pixels
On-board graphics card maximum resolution (VGA)	1920 x 1200 pixels

Processor special features

Intel Stable Image Platform Program (SIPP)	✗
Intel 64	✔
Intel Virtualization Technology (VT-x)	✔
Intel Virtualization Technology for Directed I/O (VT-d)	✗
Conflict-Free processor	✔
Intel® vPro™ Platform Eligibility	✗

Operational conditions

Tcase	72 °C

Other features

Compatibility	EliteOne 800 G1