Intel® Celeron® Processor N2830 (1M Cache, up to 2.41 GHz)

Specifications

- Essentials

Processor Number	N2830
Status	Launched
Launch Date	Q1'14
Lithography	22 nm
Recommended Customer Price	$107.00

- Performance

# of Cores	2
# of Threads	2
Processor Base Frequency	2.16 GHz
Burst Frequency	2.41 GHz
Cache	1 MB
TDP	7.5 W
Scenario Design Power (SDP)	4.5 W
VID Voltage Range	0.40V – 1.14V

- Supplemental Information

Embedded Options Available	No
Datasheet	Link
Conflict Free	Yes

- Memory Specifications

Max Memory Size (dependent on memory type)	8 GB
Memory Types	DDR3L 1333
Max # of Memory Channels	2

- Graphics Specifications

Processor Graphics ‡	Intel® HD Graphics
Graphics Base Frequency	313.00 MHz
Graphics Burst Frequency	750.00 MHz
Graphics Max Dynamic Frequency	750.00 MHz
Intel® Quick Sync Video	Yes
Intel® InTru™ 3D Technology	No
Intel® Clear Video HD Technology	No

Intel® Wireless Display	Yes
# of Displays Supported ‡	2

— Expansion Options

PCI Express Revision	2.0
PCI Express Configurations ‡	1x4
Max # of PCI Express Lanes	4

— I/O Specifications

USB Revision	3.0 and 2.0
# of USB Ports	5
Total # of SATA Ports	2

— Package Specifications

Sockets Supported	FCBGA1170
Max CPU Configuration	1
$T_{JUNCTION}$	100°C
Package Size	25mm x 27mm
Low Halogen Options Available	See MDDS

— Advanced Technologies

Intel® Turbo Boost Technology ‡	No
Intel® vPro Technology ‡	No
Intel® Hyper-Threading Technology ‡	No
Intel® Virtualization Technology (VT-x) ‡	Yes
Intel® Virtualization Technology for Directed I/O (VT-d) ‡	No
Intel® 64 ‡	Yes
Instruction Set	64-bit
Idle States	Yes
Enhanced Intel SpeedStep® Technology	Yes
Intel® Identity Protection Technology ‡	No
Intel® Rapid Storage Technology	No
Intel® Smart Connect Technology	Yes
Intel® Stable Image Platform Program (SIPP)	No

— Intel® Data Protection Technology

Intel® AES New Instructions	No
Secure Key	Yes

— Intel® Platform Protection Technology

Execute Disable Bit ‡	Yes

Anti-Theft Technology	No

Ordering and Spec Information

Trade Compliance Information

ECCN	CCATS	US HTS
3A991	NA	8542310000-HYBRD

Ordering and Spec Information

Spec Code	Ordering Code	Step	RCP
Intel® Celeron® Processor N2830 (1M Cache, up to 2.41 GHz) FC-BGA13F, Tray			
SR1W4	FH8065301729602	C0	$107.00

Download Drivers

Linux* Processor Microcode Data File
The microcode data file contains the latest Linux* microcode definitions for all Intel® Processors. Intel periodically releases these microcode updates.
Version: 20161104 (Latest)   **Date:** 11/4/2016
Operating Systems: Red Hat Linux*, Debian Linux*, Linux*, 19 more

BIOS Implementation Test Suite (BITS)
This download installs version build 2073 of the BIOS Implementation Test Suite (BITS).
Version: Build 2073 (Latest)   **Date:** 2/2/2016
Operating Systems: OS Independent

Intel® Processor Diagnostic Tool
This download installs the Intel® Processor Diagnostic Tool release 3.0.0.25, which is compatible with multiprocessor systems.
Version: 3.0.0.25 (Latest)   **Date:** 1/25/2016
Operating Systems: Linux*, Windows 7*, Windows Server 2008 R2*, 5 more

Intel® Processor Identification Utility - Bootable Version
The Intel® Processor Identification Utility is provided by Intel to identify characteristics of a processor inside a system.
Version: 5.30 (Latest)   **Date:** 8/13/2015
Operating Systems: OS Independent

Intel® HD Graphics driver for Windows* 8/8.1 (32-bit)
Installs version 1 of the Intel® HD Graphics driver for Windows* 8/8.1.
Version: 1 (Latest)   **Date:** 4/4/2014
Operating Systems: Windows 8, 32-bit*, Windows 8.1, 32-bit*

Intel® HD Graphics driver for Windows* 8/8.1 (64-bit)
Installs the Intel® HD Graphics driver for Windows* 8 and 8.1.
Version: 1 (Latest)   **Date:** 4/4/2014
Operating Systems: Windows 8, 64-bit*, Windows 8.1, 64-bit*

Intel® Processor Frequency ID Utility Windows* version [FIDXX32.MSI]
The Intel® Processor Frequency ID Utility can be used to identify Intel® processors.
Version: 7.2 (Latest)   **Date:** 11/16/2004
Operating Systems: Windows XP Home Edition*, Windows XP Professional*, Windows 98 SE*, 2 more

Intel® Processor Frequency ID Utility Bootable version [BFID_X25.EXE]
The bootable version of Intel® Processor Frequency ID Utility can be used to identify Intel® processors for non-OS dependant systems.
Version: 7.2 (Latest)   **Date:** 11/15/2004
Operating Systems: OS Independent

Linux* Processor Microcode Data File
The microcode data file contains the latest Linux* microcode definitions for all Intel® Processors. Intel periodically releases these microcode updates.
Version: 20160714 (Previously Released)   **Date:** 7/14/2016
Operating Systems: Red Hat Linux*, SUSE Linux 9.x*, Debian Linux*, 28 more

Linux* Processor Microcode Data File
The microcode data file contains the latest Linux* microcode definitions for all Intel® Processors. Intel periodically releases these microcode updates.
Version: 20160607 (Previously Released)   **Date:** 6/6/2016
Operating Systems: Red Hat Linux*, Red Hat Enterprise Linux 4.0*, Caldera Linux*, 31 more

Linux* Processor Microcode Data File
The microcode data file contains the latest Linux* microcode definitions for all Intel® processors. Intel periodically releases these microcode updates.
Version: 20151106 (Previously Released)   **Date:** 11/9/2015
Operating Systems: Red Hat Desktop 3 Update 4*, Red Hat Desktop Linux 3*, Red Hat Enterprise Linux 2.1*, 86 more

Intel® Graphics Driver for Windows® 10 and Windows 7*/8.1* [15.33]
This download installs version 15.33.39.4276 of the Intel® HD Graphics Driver for Windows* 7/8.1/10.
Version: 15.33.39.4276 (Previously Released)   **Date:** 9/21/2015
Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 3 more

Linux* Processor Microcode Data File
The microcode data file contains the latest microcode definitions for all Intel® Processors. Intel periodically releases these microcode updates.
Version: 20150121 (Previously Released)   **Date:** 1/21/2015
Operating Systems: Turbolinux*, Red Hat Desktop 3 Update 4*, Red Hat Desktop Linux 3*, 90 more

Linux* Processor Microcode Data File
The microcode data file 20150107 for Linux* contains the latest microcode definitions for all Intel® Processors. Intel periodically releases these microcode updates.
Version: 20150107 (Previously Released)   **Date:** 1/7/2015
Operating Systems: Turbolinux*, Red Hat Desktop 3 Update 4*, Red Hat Desktop Linux 3*, 88 more

Linux* Processor Microcode Data File
The microcode data file 20140913 for Linux* contains the latest microcode definitions for all Intel® Processors. Intel periodically releases these microcode updates.
Version: 20140913 (Previously Released)   **Date:** 9/15/2014
Operating Systems: Red Hat Desktop 3 Update 4*, Red Hat Desktop Linux 3*, Red Hat Enterprise Linux 2.1*, 81 more

Linux* Processor Microcode Data File
The microcode data file 20140624 for Linux* contains the latest microcode definitions for all Intel® Processors. Intel periodically releases these microcode updates.
Version: 20140624 (Previously Released)   **Date:** 6/24/2014
Operating Systems: Linux*

Linux* Processor Microcode Data File
The microcode data file 20140430 for Linux* contains the latest microcode definitions for all Intel® Processors. Intel periodically releases these microcode updates.
Version: 20140430 (Previously Released)   **Date:** 4/30/2014
Operating Systems: Linux*

Linux* Processor Microcode Data File
The microcode data file 20140122 for Linux* contains the latest microcode definitions for all Intel® Processors. Intel periodically releases these microcode updates.

Version: 20140122 (Previously Released)   **Date:** 1/22/2014

Operating Systems: Turbolinux*, Red Hat Desktop 3 Update 4*, Red Hat Desktop Linux 3*, 79 more

Linux* Processor Microcode Data File
The microcode data file 20130906 for Linux* contains the latest microcode definitions for all Intel® Processors. Intel periodically releases these microcode updates.

Version: 20130906 (Previously Released)   **Date:** 9/6/2013

Operating Systems: Turbolinux*, Red Hat Desktop 3 Update 4*, Red Hat Desktop Linux 3*, 79 more

Linux* Processor Microcode Data File
The microcode data file 20130808 for Linux* contains the latest microcode definitions for all Intel® Processors. Intel periodically releases these microcode updates.

Version: 20130808 (Previously Released)   **Date:** 8/14/2013

Operating Systems: Turbolinux*, Red Hat Desktop 3 Update 4*, Red Hat Desktop Linux 3*, 79 more

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