## QNAP TS-453BU NAS Rack (1U) Intel® Celeron® J3455 HDD QNAP Turbo System Aluminium, Black

Brand : QNAP

Product code: TS-453BU-2G-48TB-GLD

Product name : TS-453BU

48TB (Western Digital Gold), Intel Apollo Lake J3455 (1.5/2.3GHz), 2GB DDR3L, Gigabit LAN QNAP TS-453BU. Type: NAS. Chassis type: Rack (1U). Processor family: Intel® Celeron®, Processor model: J3455, Processor frequency: 1.5 GHz. Installed storage drive type: HDD. Operating system installed: QNAP Turbo System





Storage		Software	
Storage drive interface *	Serial ATA III	Linux operating systems supported	1
RAID support *	4	Mac compatibility	1
RAID levels0, 1, 5, 6, 10, 50, 60, JBODOnline RAID migration✓Online RAID expansion✓Hot-swap drive bays✓Supported file systemsHFS+, exFAT, ext3, ext4Storage drives installed *✓	1	Mac operating systems supported	Mac OS X 10.7 Lion, Mac OS X 10.8 Mountain Lion, Mac OS X 10.9 Mavericks
	Server operating systems supported	Windows Server 2003, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, Windows Server 2016	
Number of storage drives supported	4	Power	
Installed storage drive type *	HDD	Power supply location	Built-in
Supported storage drive types *	HDD & SSD	Power supply unit (PSU) capacity	250 W
Bad block scan		Number of power supply units	1
Processor	•	Redundant power supply (RPS) support	×
Processor manufacturer *	Intel	Power consumption (typical)	31.5 W
Processor family *	Intel <sup>®</sup> Celeron <sup>®</sup>	Power consumption (HDD standby)	21.3 W
Processor model *	J3455	AC input voltage	100 - 240 V
Processor frequency *	1.5 GHz	AC input frequency	50 - 60 Hz
Processor boost frequency	2.3 GHz	Fan voltage	12 V
Processor cores	4	Weight & dimensions	
Processor threads	4	Width *	439 mm
Processor cache	2 MB	Depth *	499 mm
CPU configuration (max)	1	Height *	44 mm
ECC supported by processor	×	Weight	6.53 kg
PCI Express configurations	1x2+2x1, 4x1	Package weight	9.47 kg
PCI Express slots version	2.0 Sweet Casha	Packaging content	
Processor cache type Processor code	Smart Cache SR2Z9	Cables included	AC, LAN (RJ-45)
Processor codename	Apollo Lake	Quick installation guide	✓
Processor lithography	14 nm	Processor special features	
Processor operating modes	64-bit	Embedded options available	1
Processor package size	24 x 31 mm	Enhanced Intel SpeedStep	v
Processor socket	BGA 1296	Technology	4
Stepping	B1	Execute Disable Bit	1
Tjunction	105 °C	Idle States	1
Thermal Design Power (TDP)	10 W	Intel 64	1

Processor		Processor special features	
On-board graphics card model	Intel <sup>®</sup> HD Graphics 500	Intel Clear Video Technology	1
Maximum internal memory	8 GB	Intel Enhanced Halt State	1
supported by processor	0.00	Intel Identity Protection Technology	1.00
Conflict-Free processor	✓	version	1.00
Memory		Intel Rapid Storage Technology	×
Maximum RAM supported	8 GB	Intel Secure Boot	4
Memory slots	2	Intel Secure Boot Technology version	1.00
Memory form factor	SO-DIMM	Intel Secure Key Technology version	1.00
Flash memory	4096 MB	Intel Small Business Advantage	
Network		(SBA) version	0.00
		Intel Smart Connect Technology	×
Ethernet LAN *		Intel Smart Connect Technology	0.00
Ethernet LAN data rates	10,100,1000 Mbit/s	version	0.00
Wi-Fi	×	Intel Smart Response Technology	0.00
DHCP client	1	version	
DHCP server	4	Intel Stable Image Platform Program (SIPP)	×
Jumbo frames support	4	Intel Stable Image Platform Program	
iSCSI support Wake on LAN ready		(SIPP) version	0.00
Wake-on-LAN ready		Intel Trusted Execution Technology	×
Supported network protocols	CIFS/SMB, AFP (v3.3), NFS(v3), FTP, FTPS, SFTP, TFTP, HTTP(S), Telnet,	Intel Virtualization Technology (VT-	1
	SSH, iSCSI, SNMP, SMTP, SMSC	x)	•
Dynamic DNS (DDNS)	✓	Intel Virtualization Technology for Directed I/O (VT-d)	1
Ports & interfaces		Intel VT-x with Extended Page	
USB port *	1	Tables (EPT)	4
USB 3.2 Gen 1 (3.1 Gen 1) Type-A		Intel® AES New Instructions (Intel®	J
ports quantity	4	AES-NI)	4
HDMI ports quantity	1	Intel® Anti-Theft Technology	×
HDMI version	1.4b	(Intel® AT)	
Ethernet LAN (RJ-45) ports *	4	Intel <sup>®</sup> Clear Video HD Technology (Intel <sup>®</sup> CVT HD)	1
Graphics		Intel <sup>®</sup> Clear Video Technology for	
On-board graphics card base		Mobile Internet Devices (Intel CVT	1
frequency	250 MHz	for MID)	
On-board graphics card burst	750 MHz	Intel <sup>®</sup> High Definition Audio (Intel <sup>®</sup> HD Audio)	1
frequency		Intel® Hyper Threading Technology	
On-board graphics card dynamic	750 MHz	(Intel® HT Technology)	×
frequency (max)		Intel <sup>®</sup> Identity Protection	1
Maximum on-board graphics card memory	8 GB	Technology (Intel® IPT)	
Number of displays supported (on-	2	Intel® Insider™	×
board graphics)	3	Intel® InTru <sup>™</sup> 3D Technology	×
Design		Intel® OS Guard	×
Chassis type *	Rack (1U)	Intel® Quick Sync Video Technology	
Cooling type *	Active	Intel® Secure Key	4
Product colour	Aluminium, Black	Intel® Small Business Advantage (Intel® SBA)	×
Number of fans	2 fan(s)	Intel® Smart Response Technology	×
Fan diameter	4 cm	Intel® Turbo Boost Technology	×
LED indicators	HDD, LAN, Status, USB	Intel® Wireless Display (Intel®	
		WiDi)	×
Performance		Maximum number of PCI Express	6
Type *	NAS	lanes	
Backup function *	4	Number of execution units	12
Backup features	Cloud, iSCSI LUN	Thermal Monitoring Technologies	4
Buzzer	4	UART	1
Multilingual support		Memory channels supported by processor	Dual
Number of users	4096 user(s)	Memory types supported by	DDR3L, LPDDR3-SDRAM, LPDDR4-
Noise level	38.6 dB	processor	SDRAM
Management protocols	SNMP	Operational conditions	
Web-based management Share folder access right	4	Operating temperature (T-T)	0 - 40 °C
management	1	Operating relative humidity (H-H)	0 - 95%
Security algorithms	256-bit AES, FIPS 140-2, HTTPS, SSH	operating relative number (II-II)	5 5570

## Performance

Reset button	<		
On/off switch	1		
Built-in iTunes server	✓		
Built-in FTP server	✓		
Browser supported	Microsoft Internet Explorer 10+, Google Chrome, Mozilla Firefox, Apple Safari 7+		
System log	✓		
Hot spare	✓		
S.M.A.R.T. support	✓		
Share folder	512		
Software			
Operating system installed *	QNAP Turbo System		
Operating system version	4.3		
	Windows 10, Windows 10 Education, Windows 10 Education x64, Windows 10 Enterprise,		

Windows 10 Enterprise x64, Windows 10 Home, Windows 10 Home x64, Windows 10 IOT Core, Windows 10 Pro, Windows 10 Pro x64, Windows 7, Windows 7 Enterprise, Windows 7 Enterprise x64, Windows 7 Home Basic, Windows 7 Home Basic x64, Windows 7 Home Premium,

Windows 7 Home Premium x64, Windows 7 Professional, Windows 7 Professional x64, Windows 7 Starter, Windows 7 Starter x64, Windows 7 Ultimate, Windows 7 Ultimate x64, Windows 7 x64, Windows 8, Windows 8 Enterprise, Windows 8 Enterprise x64, Windows 8 Pro, Windows 8 Pro x64, Windows 8 x64

Windows operating systems supported

## Other features

Processor ARK ID

95594

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