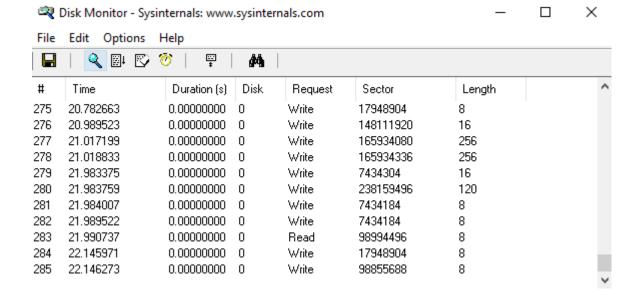


A Program leírása szerint virtuális merevlemezt képes létrehozni a kívánt számítógépen, mely online formában is használható. Hely szűkében a merevlemezen nem hoztam létre virtuális merevlemezt.



# 2.b)

TCPView - Sysinternals: www.sysinternals.com

File Options Process View Help

rocess /	PID	Protocol	Local Address	Local Port	Remote Address	Remote Port	State	Sent Packets	Sent Bytes	Revd	Packets Rovo	d Bytes
System Proc	0	TCP	desktop-ihg09dl	54415	prg03s06-in-f3.1e1	. https	TIME WAIT					-
[System Proc		TCP	desktop-ihq09dl	54424	35.186.224.25	https	TIME_WAIT		3	458	4	4,94
[System Proc		TCP	desktop-ihq09dl	54425	104.123.111.225	http	TIME_WAIT		1	213	2	4,56
[System Proc atmgr.exe		TCP	desktop-ihq09dl	54416	prg03s06-in-f14.1e		TIME_WAIT		11	13,106	8	1,52
atmgr.exe	15604	TCP	DESKTOP-IHQ09		localhost	64233	ESTABLISHED					
atmgr.exe	15604	TCP	DESKTOP-IHQ09	64233	localhost	64232	ESTABLISHED					
atmgr.exe	15604	TCP	DESKTOP-IHQ09		localhost	64235	ESTABLISHED					
atmgr.exe	15604 15604	TCP TCP	DESKTOP-IHQ09 DESKTOP-IHQ09		localhost	64234	ESTABLISHED					
atmgr.exe	15604	TCP	DESKTOP-IHQU9		localhost localhost	64237 64236	ESTABLISHED ESTABLISHED					
atmgr.exe atmgr.exe	15604	TCP	DESKTOP-IHQ05		localhost	64239	ESTABLISHED					
atmgr.exe	15604	TCP	DESKTOP-IHQ09		localhost	64238	ESTABLISHED					
chrome.exe	10316	TCP	desktop-ihq09dl	51996	142.250.27.188	5228	ESTABLISHED		1	26	1	2
chrome.exe	10316	TCP	desktop-ihg09dl	52009	edge-star-shv-01-v		ESTABLISHED		106	4,924	109	3,31
chrome.exe	3752	UDP	DESKTOP-IHQ09		×	×				.,	16	44
chrome.exe	10316	UDP	DESKTOP-IHQ09		×	×					16	44
chrome.exe	3752	UDP	DESKTOP-IHQ09		×	×						
chrome.exe	10316	UDP	DESKTOP-IHQ09		×	×						
chrome.exe	3752	UDP	DESKTOP-IHQ09	5353	×	×						
chrome.exe	3752	UDP	DESKTOP-IHQ09		×	×						
chrome.exe	10316	UDP	DESKTOP-IHQ09		×	*						
chrome.exe	10316	UDP	DESKTOP-IHQ09		*	*						
chrome.exe	3752	UDPV6	[0:0:0:0:0:0:0:0]	5353	×	×						
chrome.exe	3752	UDPV6	[0:0:0:0:0:0:0:0]	5353	*							
chrome.exe	10316 10316	UDPV6 UDPV6	[0:0:0:0:0:0:0:0] [0:0:0:0:0:0:0:0]	5353 5353	" *	*						
chrome.exe chrome.exe	10316	TCP	desktop-iha09dl	54428	prg03s06-in-f3.1e1	letter e	ESTABLISHED		6	1,351	7	1,35
dasHost.exe	4752	UDP	DESKTOP-IHQ09		× ×	. naps	ESTABLISHED		0	1,001	,	1,00
dasHost.exe	4752	UDP	DESKTOP-IHQ09		×	×						
dasHost.exe	4752	UDP	DESKTOP-IHQ09		×	×						
dasHost, exe	4752	UDPV6	[0:0:0:0:0:0:0:0]	3702	×	×						
dasHost.exe	4752	UDPV6	[0:0:0:0:0:0:0:0]	3702	×	×						
dasHost.exe	4752	UDPV6	[0:0:0:0:0:0:0:0]	61953	ж	×						
DiscSoftBusS	10992	TCP	DESKTOP-IHQ09	45769	DESKTOP-IHQ09	0	LISTENING					
DiscSoftBusS		UDP	DESKTOP-IHQ09		×	×						
jhi_service.exe	4688	TCPV6	[0:0:0:0:0:0:0:1]	49669	[0:0:0:0:0:0:0:0]	0	LISTENING					
lsass.exe	872	TCP	DESKTOP-IHQ09		DESKTOP-IHQ09		LISTENING					
lsass.exe	872	TCPV6	[0:0:0:0:0:0:0:0]	49664	[0:0:0:0:0:0:0:0]	0	LISTENING					
nvcontainer.exe		UDP	DESKTOP-IHQ09		×	*						
NVIDIA Web		TCP	DESKTOP-IHQ09		DESKTOP-IHQ09	U	LISTENING					
NVIDIA Web		UDP	DESKTOP-IHQ09		×		LIGHTHUNG					
services.exe	864 864	TCP TCPV6	DESKTOP-IHQ09 [0:0:0:0:0:0:0:0]	. 49670 49670	DESKTOP-IHQ09 [0:0:0:0:0:0:0:0]	0	LISTENING LISTENING					
services.exe Skype.exe	17244	TCP	desktop-ihg09dl	52424	40.74.219.49	https	ESTABLISHED		7	19,138	7	3,62
Skype.exe	17244	TCP	desktop-ing09dl	54101	40.74.219.49	https	ESTABLISHED		12	19,864	7	2,88
Skype.exe	14072	TCP	desktop-ihg09dl	54111	52.114.104.80	https	ESTABLISHED		23	13,455	23	13,38
Skype.exe	14072	TCP	desktop-ihq09dl	54144	13.69.158.96	https	ESTABLISHED		16	4,924	16	50,79
Skype.exe	17244	TCP	desktop-ihg09dl	54423	68.232.34.200	https	ESTABLISHED		6	1,847	11	8,54
Skype.exe	14072	UDP	desktop-ihg09dl	9410	×	*		2.3	370	395,034	21,714	4,232,89
Skype.exe	14072	UDP	desktop-ihq09dl	18198	×	×					=	.,,
Skype.exe	14072	UDP	desktop-ihq09dl	58203	×	×						
Skype.exe	14072	UDP	desktop-ihq09dl	59021	ж	×						
Skype.exe	14072	UDP	DESKTOP-IHQ09		ж	ж			14	5,464	40	4,23
Skype.exe	14072	UDPV6	[0:0:0:0:0:0:0:0]	65258	ж	×						
spoolsv.exe	3332	TCP	DESKTOP-IHQ09	49668	DESKTOP-IHQ09		LISTENING					
spoolsv.exe	3332	TCPV6	[0:0:0:0:0:0:0:0]	49668	[0:0:0:0:0:0:0:0]	0	LISTENING					
svchost.exe	904	TCP	DESKTOP-IHQ09	epmap	DESKTOP-IHQ09		LISTENING					
svchost.exe	9332	TCP	DESKTOP-IHQ09		DESKTOP-IHQ09		LISTENING					
svchost.exe	1600	TCP	DESKTOP-IHQ09 DESKTOP-IHQ09		DESKTOP-IHQ09 DESKTOP-IHQ09		LISTENING					
svchost.exe svchost.exe	788 4564	TCP TCP	desktop-iha09dl	. 49667 51958	51,103,5,159		LISTENING ESTABLISHED					
svchost.exe svchost.exe	4564 5656	TCP	DESKTOP-IHQ09		51.103.5.159 DESKTOP-IHQ09	https	LISTENING					
svchost.exe	14000	TCP	DESKTOP-IHQU9		DESKTOP-IHQ09		LISTENING					
svchost.exe	4160	UDP	DESKTOP-IHQU9 DESKTOP-IHQU9	ieakmo	» × × × × × × × × × × × × × × × × × × ×	v *	LISTENING					
svchost.exe svchost.exe	5492	UDP	DESKTOP-IHQUS		×	×					148	62,72
sychost exe	5492	LIDP	deskton-iha09dl	ssdp	ж	×					170	02,72
	Established: 17		Time Wait: 4	Close Wait: 1								

# **TCPView**

# Copyright 1997-2010 Mark Russinovich and Bryce Cogswell Sysinternals - www.sysinternals.com

# Introduction

TCPView is a Windows program that will show you detailed listings of all TCP and UDP endpoints on your system, including the owning process name, remote address and state of TCP connections. TCPView provides a conveniently presented subset of the Netstat program that ships with Windows NT/2000/XP.

TCPView requires Windows XP or higher.

A program értelmezésem szerint részletes leírást ad az eszközünkön futó azon programokról melyek használják internetkapcsolatunkat jelen pillanatban vagy arra várnak hogy sorra kerüljenek esetleg válaszra várakoznak.

Process Explorer - Sysinternals: www.sysinternals.com [DESKTOP-IHQ09DL\simon]

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	' -	· 🏵 📙	السا		N	
ocess	CPU	Private Bytes	Working Set	PID	Description	Company Name
Registry	70.00	9,392 K	67,040 K	100		
System Idle Process	76.38	60 K	8 K	0		
System	0.47	208 K	3,064 K	4	II-IIIIIIII	
■ Interrupts	0.81	0 K	0 K		Hardware Interrupts and DPC	S
smss.exe	- 0.01	1,080 K	1,076 K	484		
Memory Compression	< 0.01	2,536 K	279,248 K	2260		
Csrss.exe		1,992 K	5,472 K	692 792		
wininit.exe	1 71	1,400 K	5,972 K	864		
services.exe	1.71	7,788 K 30,408 K	9,836 K 35,616 K		Host Process for Windows S.	Microsoft Compretion
dllhost.exe	< 0.01	3,424 K	10,588 K	6916	nost process for windows 5.	Microsoft Corporation
Start Menu Experience		42.428 K	60,684 K			
RuntimeBroker.exe		11,640 K			Runtime Broker	Microsoft Corporation
SearchApp.exe	Susp	150,996 K	42,764 K		Search application	Microsoft Corporation
RuntimeBroker.exe	Susp	24,712 K			Runtime Broker	Microsoft Corporation
dllhost.exe		5.468 K			COM Surrogate	Microsoft Corporation
SettingSyncHost.exe		15,652 K			Host Process for Setting Syn.	•
Lock App.exe	Susp	17,600 K			Lock App.exe	Microsoft Corporation
RuntimeBroker.exe	Susp	10,948 K	-		Runtime Broker	Microsoft Corporation
RuntimeBroker.exe		7.372 K			Runtime Broker	Microsoft Corporation
Shell Experience Host	Susp	60,576 K	39.620 K		Windows Shell Experience H	
RuntimeBroker.exe	Jusp	9,680 K			Runtime Broker	Microsoft Corporation
TextInputHost.exe	< 0.01	25,024 K	66,740 K		Nuntillie blokel	Microsoft Corporation
ApplicationFrameHost	₹ 0.01	36,552 K	14.636 K		Application Frame Host	Microsoft Corporation
UserOOBEBroker.exe		2,152 K	9.060 K		User OOBE Broker	Microsoft Corporation
CompPkgSrv.exe		2,316 K			Component Package Suppor	
WinStore.App.exe	Susp	50,592 K	2,512 K	8656		Microsoft Corporation
Runtime Broker.exe	< 0.01	7,604 K	10,116 K		Runtime Broker	Microsoft Corporation
Time.exe	Susp	21,060 K	2,072 K			Microsoft Corporation
RuntimeBroker.exe	Jusp	2,980 K	8,680 K		Runtime Broker	Microsoft Corporation
SystemSettingsBroker		23,156 K	12.372 K		System Settings Broker	Microsoft Corporation
Video.UI.exe	Susp	20,768 K	10,732 K		System Settings Broker	Microsoft Corporation
Runtime Broker.exe	ouop	1,580 K	2.684 K		Runtime Broker	Microsoft Corporation
Maps.exe	Susp	96,532 K	2,148 K			Prior Cook Corporation
Runtime Broker.exe	ouop	3,060 K			Runtime Broker	Microsoft Corporation
Runtime Broker.exe		4,744 K			Runtime Broker	Microsoft Corporation
■ dllhost.exe		7,836 K			COM Surrogate	Microsoft Corporation
Mo UsoCoreWorker.exe		181,240 K	9,236 K			The second conjustion
Microsoft.Photos.exe	Susp	54,760 K	1,120 K			
Runtime Broker.exe	- Casp	13,200 K			Runtime Broker	Microsoft Corporation
■ YourPhone.exe	Susp	28,708 K			YourPhone	Microsoft Corporation
Runtime Broker.exe	,,,,,,	7,020 K			Runtime Broker	Microsoft Corporation
SpeechRuntime.exe		26,724 K			Speech Runtime Executable	Microsoft Corporation
SystemSettings.exe	Susp	28,628 K	1,700 K		*	Microsoft Corporation
GameBar.exe	Susp	17,636 K			Xbox Game Bar	Microsoft Corporation
GameBarFTServer.exe		2,844 K			Xbox Game Bar Full Trust C	
Runtime Broker.exe		2,712 K	11,720 K	19028	Runtime Broker	Microsoft Corporation
Runtime Broker.exe		2,132 K	9,540 K	19304	Runtime Broker	Microsoft Corporation
VBoxSVC.exe	< 0.01	8,144 K			VirtualBox Interface	Oracle Corporation
WmiPrvSE.exe		2,256 K	9,916 K			
smartscreen.exe		7,924 K			Windows Defender SmartScr.	Microsoft Corporation
■ WUDFHost.exe		4,896 K	10,360 K	364		
svchost.exe	0.01	25,104 K	23,244 K		Host Process for Windows S.	Microsoft Corporation
WUDFHost.exe	< 0.01	14,168 K	12,724 K	1044		
svchost.exe		3,196 K	7,584 K		Host Process for Windows S.	Microsoft Corporation
svchost.exe		2,920 K	9,532 K		Host Process for Windows S.	•
svchost.exe		2,336 K	11,584 K		Host Process for Windows S.	•
svchost.exe		2,460 K	8,988 K		Host Process for Windows S.	•
		2,	3,000 11			

# Process Explorer Copyright © 1996-2012 Mark Russinovich Sysinternals - www.sysinternals.com

Process Explorer is an advanced process management utility that picks up where Task Manager leaves off. It will show you detailed information about a process including its icon, command-line, full image path, memory statistics, user account, security attributes, and more. When you zoom in on a particular process you can list the DLLs it has loaded or the operating system resource handles it has open. A search capability enables you to track down a process that has a resource opened, such as a file, directory or Registry key, or to view the list of processes that have a DLL loaded.

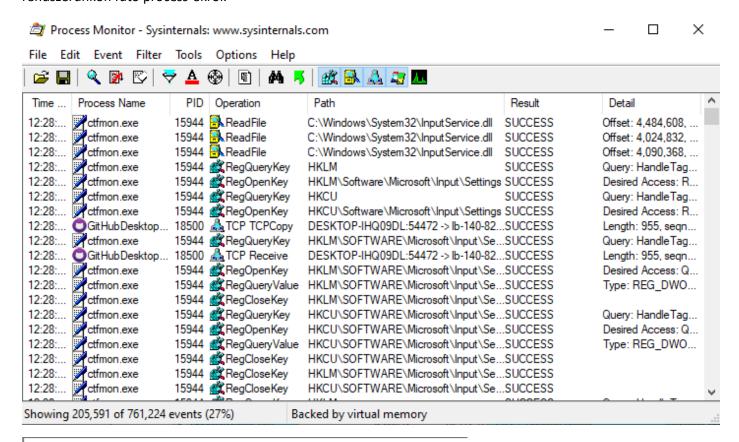
The Process Explorer display consists of two sub-windows. The top always shows a list of the currently active processes, including the names of their owning accounts, whereas the information displayed in the bottom window, which you can close, depends on the mode that Process Explorer is in: if it is in handle mode you will see the handles that the process selected in the top window has opened; if Process Explorer is in DLL mode you will see the DLLs and memory-mapped files that the process has loaded.

Process Explorer also has a powerful search capability that will quickly show you which processes have particular handles opened or DLLs loaded. The unique capabilities of Process Explorer make it useful for tracking down DLL-version problems or handle leaks, and provide insight into the way Windows and applications work.

You can obtain equivalent command-line tools, Handle and ListDLLs, at the Sysinternals Web site.

Process Explorer does not require administrative privileges to run and works on clients running Windows XP and higher (Including IA64) and servers running Windows Server 2003 and higher (Including IA64).

A program saját leírása szerint a task manager továbbfejlesztett verziója, amely részletesebb leírást ad az operációs rendszerünkön futó process-ekről.

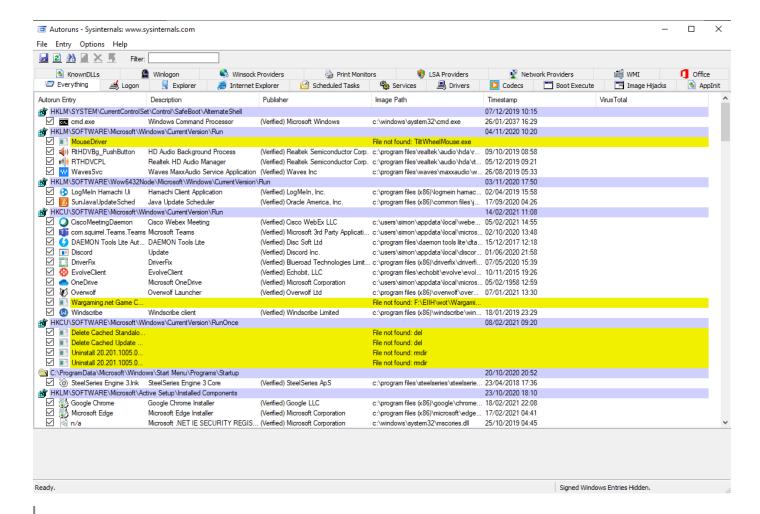


#### Process Monitor

Copyright © 1996-2010 Mark Russinovich and Bryce Cogswell Sysinternals - <a href="https://www.sysinternals.com">www.sysinternals.com</a>

Process Monitor is an advanced monitoring tool for Windows that shows real-time file system, Registry and process/thread activity. It combines the features of two legacy Sysinternals utilities, Filemon and Regmon, and adds an extensive list of enhancements including rich and non-destructive filtering, comprehensive event properties such session IDs and user names, reliable process information, full thread stacks with integrated symbol support for each operation, simultaneous logging to a file, and much more. Its uniquely powerful features will make Process Monitor a core utility in your system troubleshooting and malware hunting toolkit.

A program hasonló az előzőhöz abban, hogy process-eket vizsgál, viszont az előzővel ellentétben kevesebb szempontját figyeli azoknak.



#### Autoruns

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This utility, which has the most comprehensive knowledge of auto-starting locations of any startup monitor, shows you what programs are configured to run during system bootup or login, and what extension load into various Windows processes, including Explorer and Internet Explorer. It reports the image timestamp of executables, the last-modified timestamp of other file types, and the last-modified timestamp of the autostart locations. A "Hide Signed Microsoft Entries" option helps you to zoom in on third-party auto-starting images that have been added to your system.

Ez a program az előző kettővel ellentétben nem a jelenleg futó process-ekre koncentrál hanem a bekapcsolaskor operációs rendszer által először végrehajtott műveletekre.

```
Administrator: Command Prompt
    Logon server:
    DNS Domain:
    UPN:
[7] Logon session 00000000:0001ff1c:
    User name: Window Manager\DWM-1
    Auth package: Negotiate
   Logon type: Interactive Session: 1
   Logon - 5,
Session: 1
5-1-5-90-0-1
   Logon time:
                 20/01/2021 22:16:44
   Logon server:
   DNS Domain:
   UPN:
[8] Logon session 00000000:000f1276:
    User name: DESKTOP-IHQ09DL\simon
    Auth package: CloudAP
   Logon type: Interactive
   Session: 1
Sid: S-1-5-21-2522384817-1811695907-3332416438-1001
   Logon server:
    DNS Domain:
   UPN:
[9] Logon session 00000000:000f13b9:
   User name: DESKTOP-IHQ09DL\simon
    Auth package: CloudAP
   Logon type: Interactive Session: 1
   Session: 1
Sid: 5-1-5-21-2522384817-1811695907-3332416438-1001
Logon time: 20/01/2021 22:17:05
    Logon server:
   DNS Domain:
   UPN:
[10] Logon session 00000000:010c117e:
    User name: DESKTOP-IHQ09DL\defaultuser100000
    Auth package: NTLM
   Logon type: Interactive
   Session: 2
Sid: S-
   Sid:
                 5-1-5-21-2522384817-1811695907-3332416438-1002
    Logon time: 21/01/2021 13:38:58
    Logon server: DESKTOP-IHQ09DL
    DNS Domain:
   UPN:
[11] Logon session 00000000:013743b2:
    User name: DESKTOP-IHQ09DL\defaultuser100001
    Auth package: NTLM
   Logon type: Interactive
    Session:
              3
S-1-5-21-2522384817-1811695907-3332416438-1003
    Sid:
   Logon time: 21/01/2021 13:44:07
    Logon server: DESKTOP-IHQ09DL
   DNS Domain:
   UPN:
C:\Users\simon\Desktop\SysinternalsSuite>
```

# LSA Logon Sessions 05/31/2018 • 2 minutes to read • 👙 🔊 🙊 🌑

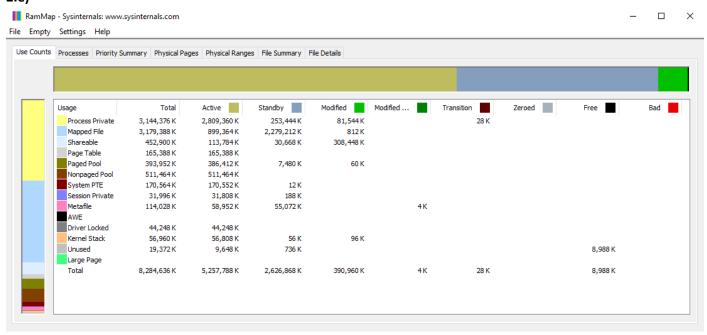
A *logon session* is a computing session that begins when a user authentication is successful and ends when the user logs off of the system.

When a user is successfully authenticated, the authentication package creates a logon session and returns information to the *Local Security Authority* (LSA) that is used to create a *token* for the new user. This token includes, among other things, a *locally unique identifier* (LUID) for the logon session, called the *logon Id*.

When a token is created, the *reference count* for the logon session is incremented. The reference count is also incremented whenever copies of the token are created for process creation, impersonation, or other uses. As token uses are completed and copies of the token are deleted, the reference count for the logon session is decremented. When the reference count reaches zero, the logon session is deleted.

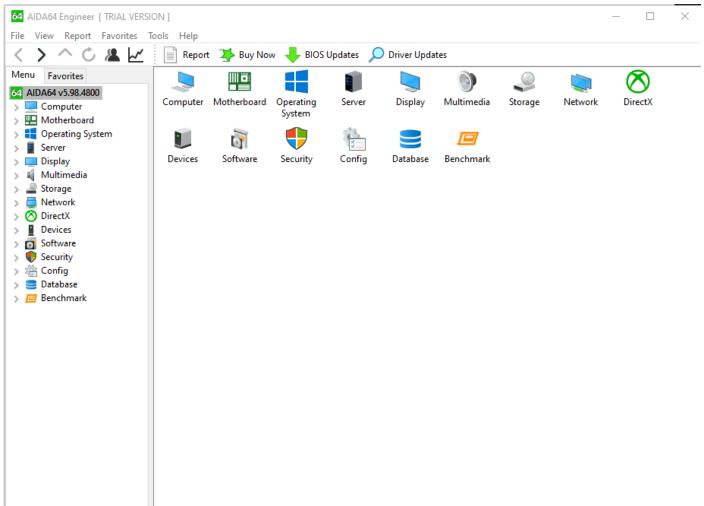
Ez a program a felhasználófiókok valamelyikébe sikeres bejelentkezésnél a fut le az eszköszünkön.

### 2.e)



Ez a program a memóriahasználatot vizsgálja eszközünkön.



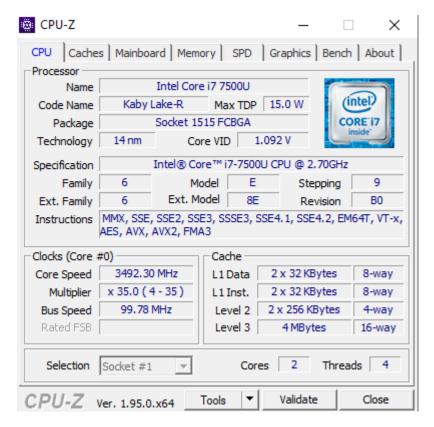


# Introducing AIDA64

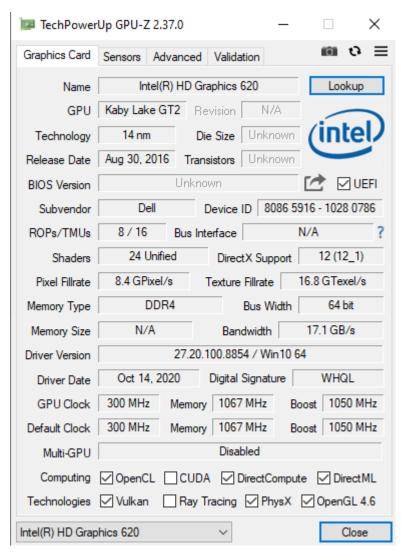


AIDA64 Engineer is a streamlined Windows diagnostic and benchmarking software for home users. AIDA64 Engineer provides a wide range of features to assist in overclocking, hardware error diagnosis, stress testing, and sensor monitoring. It has unique capabilities to assess the performance of the processor, system memory, and disk drives. AIDA64 is compatible with all current 32-bit and 64-bit Microsoft Windows operating systems, including Windows 10 and Windows Server 2016.

A program széleskörű szolgáltatásokat biztosít a felhasználó számára mintpéldául a merevlemez hiba diagnosztika vagy tesztelés esetleg szenzor értékek listázása.



Ez a program információkat biztosít a számítógép komponenseiről.



Ez a program részletesebb leírást ad eszközünk grafikus kártyájáról.