



Checklist for Building a PC that Plays HD DVD or Blu-ray Movies

Essential ingredients for the ultimate Blu-ray or HD DVD viewing experience on a PC

Playing high-definition video content on a PC is a very challenging task, so choosing the right system components is key for a great Blu-ray or HD DVD movie experience. Here are our recommendations for building a system that plays Blu-ray or HD DVD movies and takes full advantage of NVIDIA® PureVideo™ HD technology.



Basic Requirements Checklist

1. A PCI express graphics card with an NVIDIA GeForce® 7 Series HDCP-capable GPU, secure HDCP CryptoROM, and 256MB graphics memory (*see Graphics Card list and GPU Recommendations below*)
2. A fast CPU (*see CPU Recommendations chart*)
3. NVIDIA ForceWare® drivers that support PureVideo HD technology (93.71 or greater)
4. Blu-ray or HD DVD movie player compatible with PureVideo HD technology (*see Movie Player chart*)
5. Optical disc drive that supports Blu-ray and/or HD DVD movie playback (*see Optical Disc Drive chart*)

Recommended components

CPU Recommendations

CPU Family	Recommended	Minimum
Pentium 4 (Prescott)	N/R	541 (3.2G) or higher
Pentium D 8xx series (Smithfield)	N/R	840 (3.2G) or higher
Pentium D 9xx series (Presler)	945 (3.4G) or higher	930 (3.0G) or higher
Pentium EE series	955 (3.4G) or higher	Any
Pentium M (Dothan)	N/R	755 (2.0G) or higher
Core Duo (Yonah) T2xxx series	T2500 (2G) or higher	T2400 (1.83G) or higher
Core 2 Duo (Conroe) Exxxx & Xxxxx series	E6300 (1.8G) or higher	Any
Turion 64 X2 series	TL-60 or higher	TL-50 or higher
Athlon 64 X2 series	4200+ (2.2G) or higher	3800+ (2.0G) or higher
Athlon 64 FX series	FX-60 (2.0G) or higher	Any

Most MPEG-2 and VC-1 encoded titles will play on the 'Minimum' CPU configuration, however some H.264 titles are particularly difficult to play and may require the 'Recommended' CPU configuration.



GPU Recommendations

GPU Feature	Recommended	Minimum
Bus	PCI-Express	PCI-Express
Core Clock Speed	500 MHz or higher	400MHz
Frame Buffer Memory Clock Speed	500 MHz or higher	400MHz
Frame Buffer Size	256MB or higher	128MB
Frame Buffer Interface	128-bit or higher	128-bit
HDCP CryptoROM	Yes	No

Most MPEG-2 and VC-1 encoded titles will playback on the 'MINIMUM' GPU configuration, however some H.264 encoded titles are particularly challenging and will require the 'RECOMMENDED' GPU configuration for smooth playback.

Graphics Cards

To enjoy the ultimate HD DVD or Blu-ray movie experience on a PC, you'll need a PCI Express graphics card with an NVIDIA GeForce 7 Series HDCP-capable GPU, secure HDCP CryptoROM, and 256MB graphics memory. Here is a list of graphics cards that meet these requirements and our GPU recommendations:

Albatron 7950GT-512 HDCP
Albatron GeForce 7900 GS HDCP
Asus EN7600GT/HTDI/256MB (*7600GT HDCP & HDMI*)
Asus EN7900GTX/2PHT/512M (7900 GTX 512MB)
Asus EN7950GT/HTDP/512M (EN7950GT/HTDP/512M)
BFG GeForce 7950 GT OC (BFGR7950512GTOC)
Club3D GeForce 7950 GT (CGNX-G7952)
Club3D GeForce 7950 GT 256MB (CGNX-G7956)
EVGA e-GeForce 7900 GS EVGA Fan HDCP (256-P2-N623-AR)
EVGA e-GeForce 7900 GS KO EVGA Fan HDCP (256-P2-N625-AR)
EVGA e-GeForce 7900 GTX 512MB RoHS w/HDCP ([512-P2-N572-AR](#))
EVGA e-GeForce 7950 GT Evga Fan (512-P2-N633-AR)
EVGA e-GeForce 7950 GT KO (512-P2-N635-AR)
Gainward BLISS 7950GT 256MB TV DD Golden Sample (8187)
Gainward BLISS 7950GT 512MB TV DD (8101)
GigaByte GV-NX76G256HI-RH (*7600GS HDCP & HDMI*)
inno3D GeForce 7950 GT
IO Data GA-7600GSH
Leadtek WinFast PX7900 GS TDH
Leadtek WinFast PX7900 GS TDH Extreme
Leadtek WinFast PX7900 GTX TDH Extreme
Leadtek WinFast PX7900 GTX TDH Extreme w/HDCP
Leadtek WinFast PX7950 GT TDH 256MB
Leadtek WinFast PX7950 GT TDH 512MB
Leadtek WinFast PX7950 GT TDH Extreme 256MB
Leadtek WinFast PX7950 GT TDH Extreme 512MB
MSI NX7600GT Diamond Plus (*7600GT HDCP & HDMI*)
MSI NX7600GT-VT2D256E HD (7600GT)



MSI NX7600GT-VT2D256E-HD (7600GT HDCP)
 MSI NX7900GS-T2D256E-HD (7900GS)
 MSI NX7900GT-VT2D256E HD (7900GT HDCP)
 MSI NX7900GT-VT2D256E HD (7900GT)
 MSI NX7950GT-VT2D512E-HD
 MSI NX7950GT-VT2D512EZ-HD
 Palit GeForce 7950 GT
 PNY GeForce 7950 GT (VCG7950GXPB)
 POV GeForce 7950 GT 256MB (GF7950GTpci)
 Sparkle GeForce 7950 GT (SP-PX795GDH)
 XFX GeForce 7900 GTX 512MB w/HDCP (PV-T71F-YHP9)
 XFX GeForce 7900 GTX 512MB (PV-T71F-YHP9)
 XFX GeForce 7950 GT 512MB DDR3 HDCP (PV-T71J-YHFX)
 XFX GeForce 7950 GT 512MB DDR3 HDCP Extreme (PV-T71J-YHEX)
 XpertVision GeForce 7950 GT

Display Recommendations

Here is a list of HDCP-enabled PC monitors that are currently available in the market:

Manufacturer	Model Number	Screen Size	Screen Size
BenQ	FP241W	24"	1920x1200
Dell	2407WFP	24"	1920x1200
Dell	2007WFP	20"	1680x1050
NEC	Multisync 20WMGX2	20"	1680x1050
Gateway	FPD2185W	21"	1680x1050
HP	f2105	21"	1680x1050
IO Data	LCD-TV241X	24"	1920 x 1200
ViewSonic	VP2330wb	23"	1920x1200
Samsung	244T	24"	1920x1200
Samsung	214T	21"	1600x1200
Samsung	930MP	19"	1280x1024
Samsung	940MW	19"	1440x900
Samsung	242MP	24"	1920x1200
Sony	MFM-HT95	19"	1280x1024
Sony	MFM-HT205	20"	1680x1050

Movie Player Software

Here is a list of Blu-ray or HD DVD movie players that feature the PureVideo HD technology. Check vendors' Web sites for availability:

- CyberLink PowerDVD 6.5 (HD DVD)
- CyberLink PowerDVD 6.6 (Blu-ray)
- InterVideo WinDVD 7.5 HD (HD DVD)
- InterVideo WinDVD 7.5 BD (Blu-ray)
- Nero ShowTime 3 (Blu-ray & HD DVD)



Checklist, cont.

Optical Disc Drives

- Blu-ray drives that are currently available in retail:
 - IO Data BRD-AM2B/U external Blu-ray burner
 - IO Data BRD-UM2/U external Blu-ray burner
 - LG GBW-H10N 4X Blu-ray burner
 - Panasonic LF-MB121JD Blu-ray burner
 - Pioneer BDR-101A Blu-ray burner
 - Sony BWU-100A Blu-ray burner

- Blu-ray drives that have been announced with retail availability scheduled for later this year.
 - AsusTek Blu-Ray Burner – Q3/Q4
 - BenQ BW1000 and EW100G Blu-ray burner – Q3
 - Philips SPD7000 Blu-ray burner – Q3
 - Plextor PX-B900A Blu-ray burner – Q4
 - Samsung SH-B022 Blu-ray Burner – Q3/Q4

- HD DVD drives that have been announced with their expected availability in retail (Note: We are not aware of any HD DVD drives currently available in retail.)
 - HP hd100 external HD DVD drive – Q3/Q4
 - NEC HR-1100A HD DVD drive – Q3/Q4
 - Toshiba SDH802A, TS-L802A and SD-L902A HD DVD drive – Q3

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