

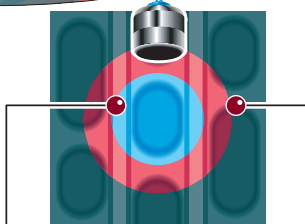
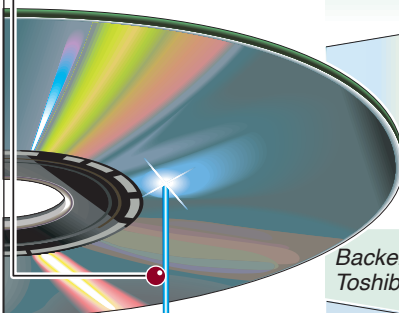
Next-generation DVD format war looms

A battle for the future of home video is set to erupt as technology and entertainment giants line up behind two rival standards for high-capacity, high-definition DVDs. But despite their technical merits, the prize will go to whichever brings consumers the best web-linked, interactive content

Blue laser technology

Used by both formats for up to 3.5x higher data density

Double layer discs of both formats – with two reflective **memory layers** – can hold double capacity



Blue laser

Wavelength 405nm*.
Smaller focal spot
can read smaller
data-carrying **pits**
in tighter **tracks**

Red laser

650nm
(standard DVD)



BLU-RAY (BD-ROM)

Single-sided: 23-27Gb

3+ hours high-definition video

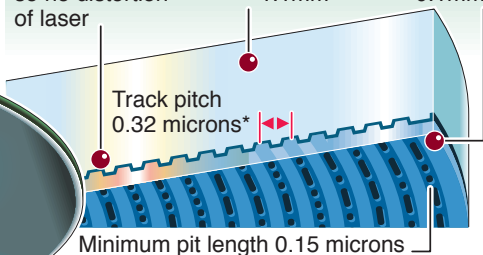
Backers include Sony, Philips, MGM, Fox

Memory layer

Close to surface
so no distortion
of laser

Polymer
substrate
– 1.1mm

Protective
silica coat
– 0.1mm

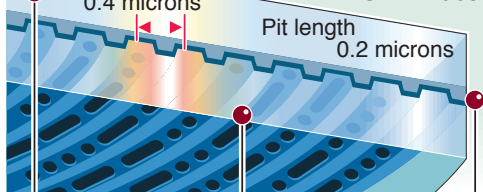


Backers include Sanyo,
Toshiba, Time Warner



Single sided: 15-20Gb

2 hrs HD video



Polycarbonate
substrate, 0.6mm

Optical layer
– 0.6mm

Memory
layer

*HD-DVDs manufactured using same process
and equipment as standard DVDs. BD-ROMs
are cheaper to produce but require new
tooling and application of protective coat*