

Panasonic Blu-ray Introduction

Products
Technology
Road Map
Benefits

Panasonic Blu-ray Disc Product Line



50GB

Dual Layer



LM-BE50DE



World 1st



LM-BR50DE



World 1st

25GB



LM-BE25DE

Rewritable



LM-BR25DE

Write Once



BD Disc Products Specifications

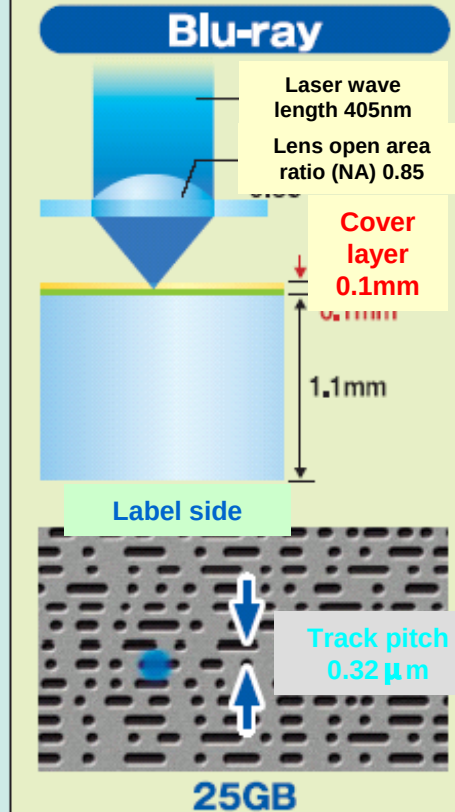
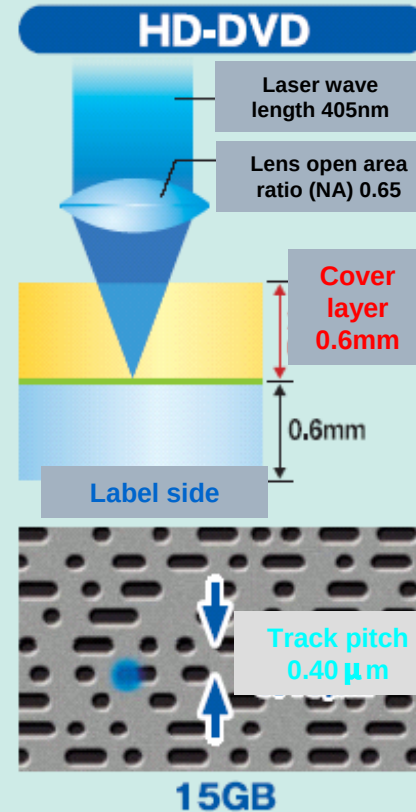
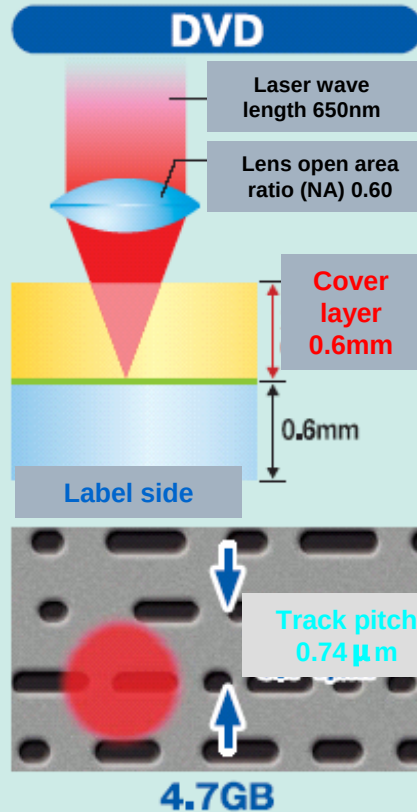
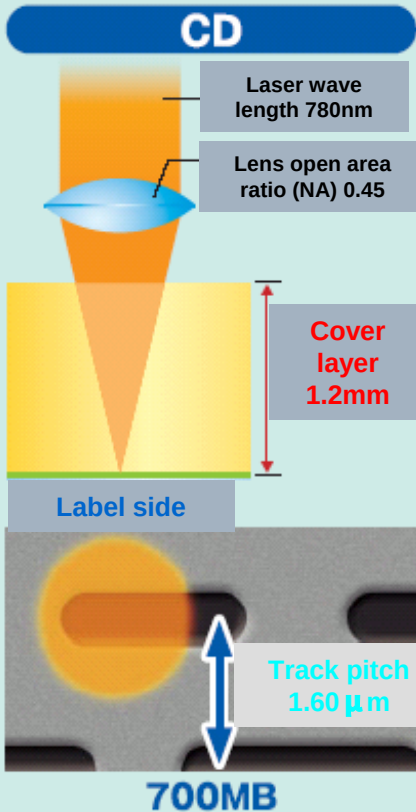


	BD-RE		BD-R	
Format Name	Blu-ray Reweirable format Ver. 2.1		Blu-ray Recordable format Ver. 1.1	
Model Number	LM-BE50DE	LM-BE25DE	LM-BR50DE	LM-BR25DE
Data Capacity	50GB	25GB	50GB	25GB
Layer Constitution	Single Sided/ Dual Layer	Single Sided/ Single Layer	Single Sided/ Dual Layer	Single Sided/ Single Layer
Recording Format	Phase Change Rewritable		Phase Change Recordable	
Laser Wavelength	405nm (Blue-violet Laser)			
Objective Lens Numerical Aperture (NA)	0.85			
Disc Diameter/Thickness	120mm x 1.2mm			
Track Pitch	0.32 um			
Data Transfer Speed	36Mbps (1X) / 72Mbps (2X)			
Rewritable Times	1000 times		-	
Hard Coating	Yes			

Ultra High Density Recording



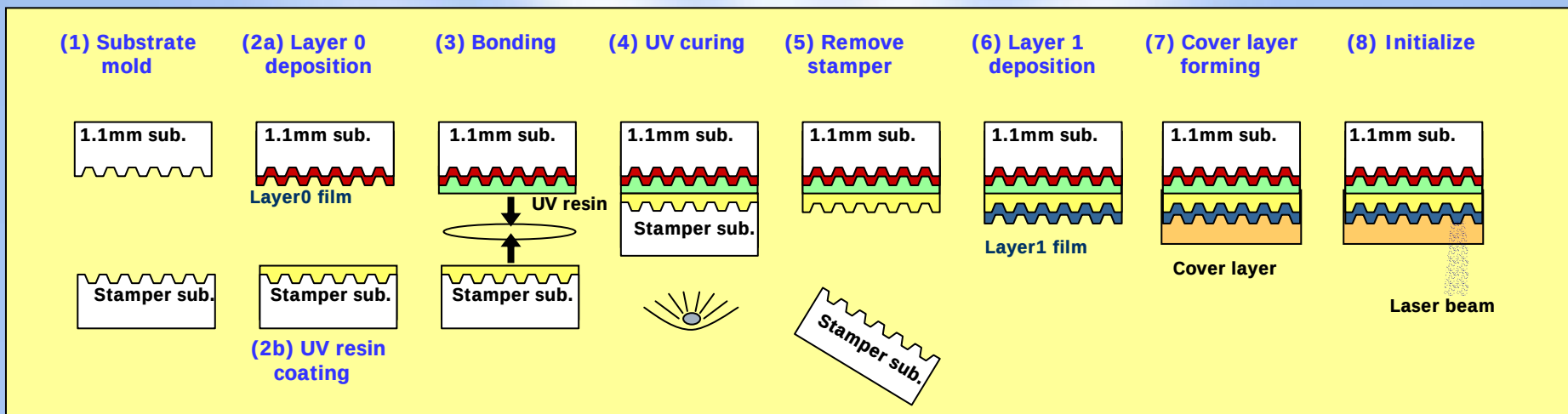
- Developed Ultra high density recording Technology
- WL:405nm, NA:0.85, TP:0.32 μ
- 25GB single Layer, 50GB dual Layer



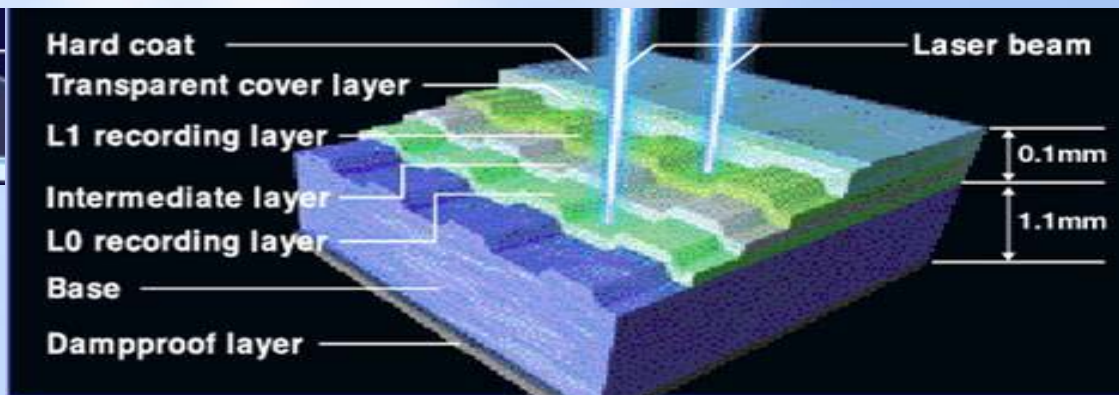
50GB Dual layer Disc <World first>



- Developed High-precision layer stack Technology
- Patented spin intermediate layer manufacturing method
- 50GB dual layer Disc, only available from Panasonic today



Panasonic ideas for life

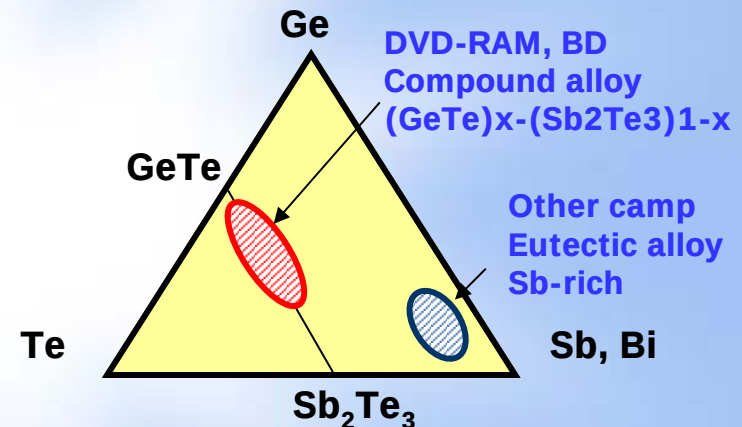
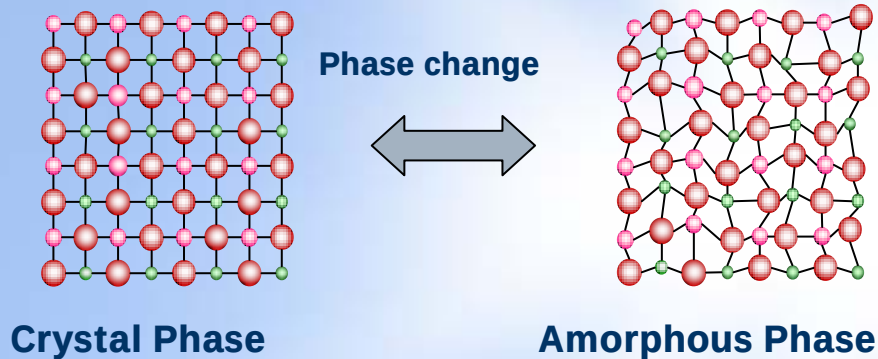


High Data Transfer Rate (max. 72Mbps.)

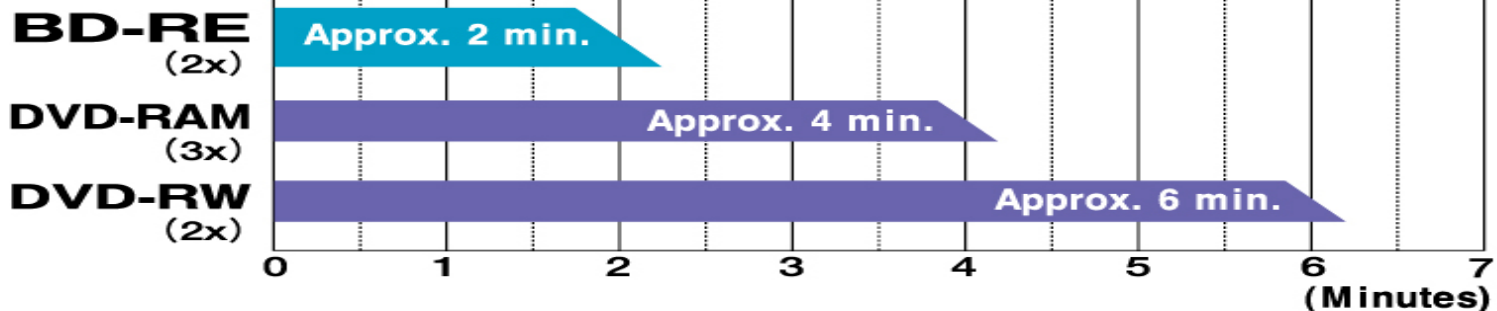


- Made faster crystallization by adding Sn and In
- Stabilize amorphous phase by replacing part of Sb to Bi

Panasonic found the phase-change basic material of Ge-Te-Sb having highly symmetric crystal structure in 1985.



■ Comparison of speed for copying 1GB folder(1MB X 1,000 files)

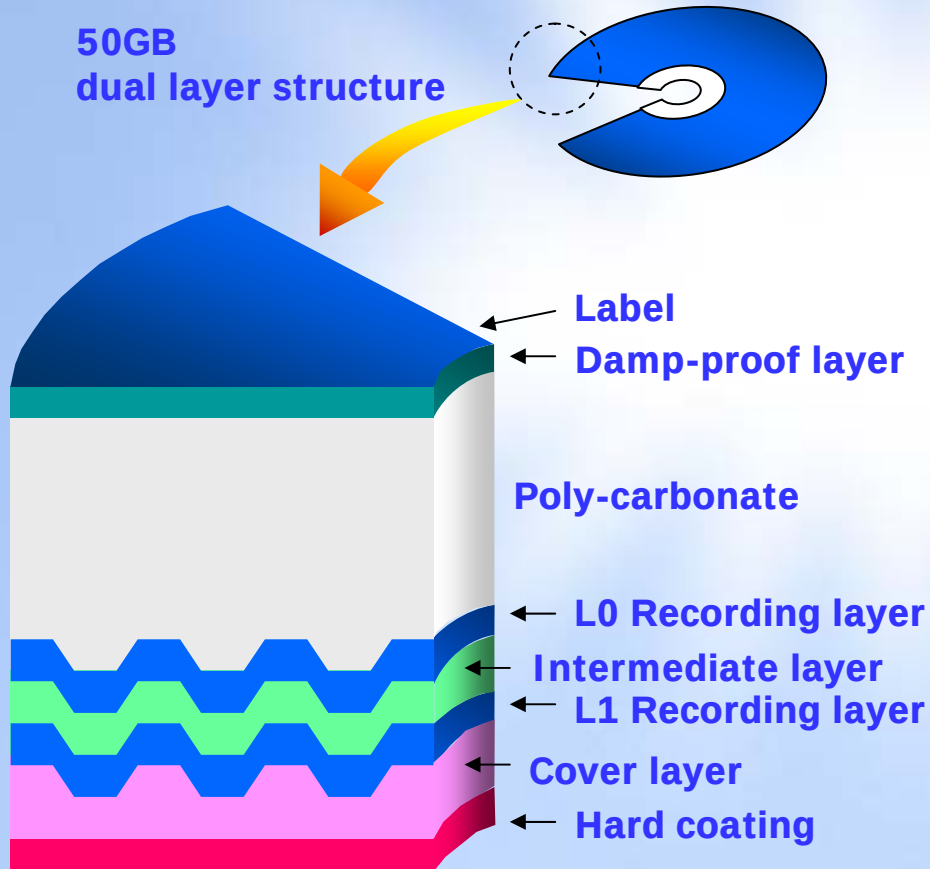


Hard coating

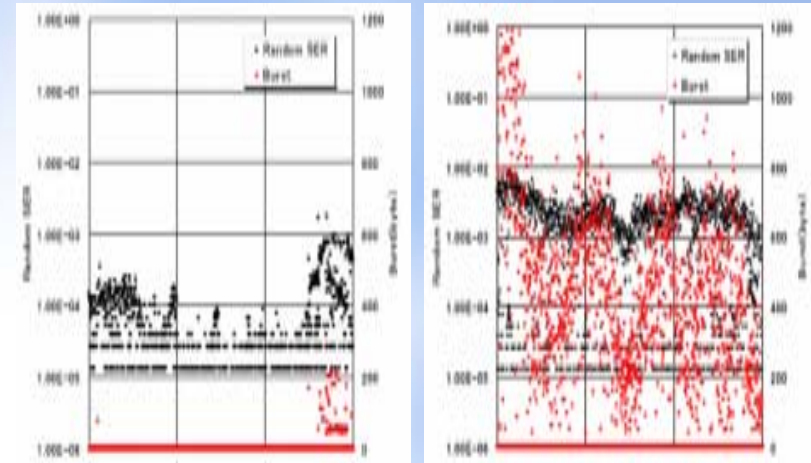


Hard coating provide both
(1) excellent durability
(2) finger print resistance

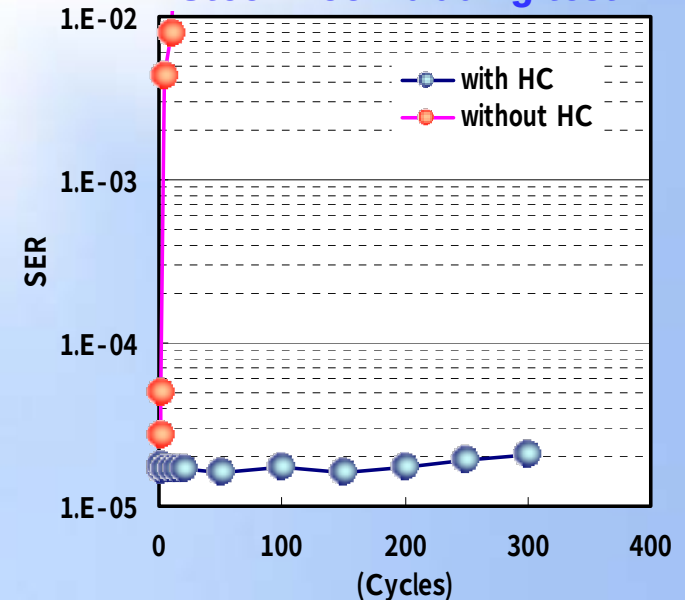
50GB
dual layer structure



Finger print resistance, SER and burst error
With HC Without HC



Steel wool rubbing test

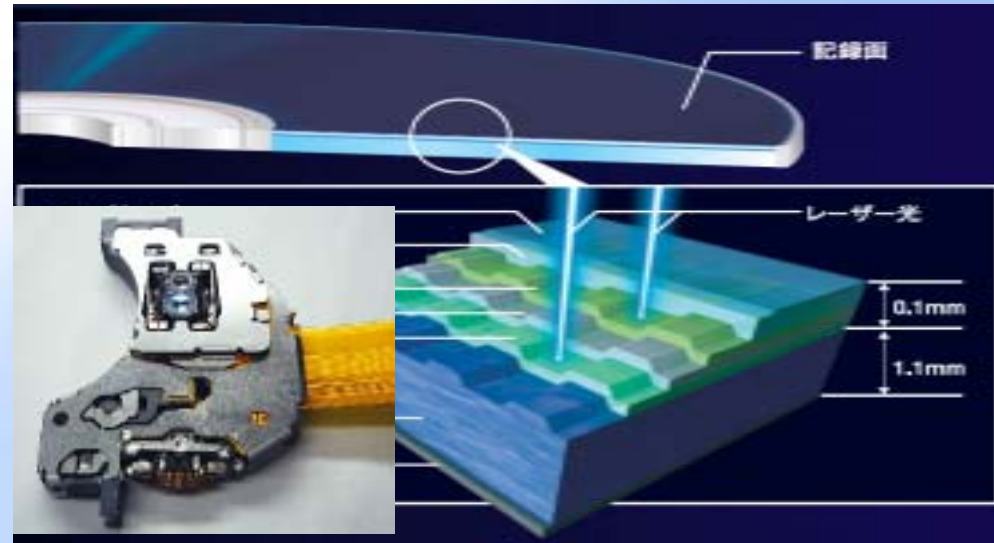


Wider range Operability



- Knows the both Drive and Media Technology
- It makes wider margin design for interchangeability
- It gives you more reliability and inter-operability

**Panasonic develop, design and produce
Drives, Optical Heads and BD Discs**





Panasonic BD Drive support Dual Layer

- Compatible with BD-R/RE, DVD-R/ +R dual layer
- Read/Write Compatibility with 13 types of Disc
- Only available from Panasonic today

BD-R



BD-RE



Dual Layer Disc supported

DVD-ROM



DVD-RAM



DVD-R/DL



DVD-RW



+R/DL



+RW



CD-ROM



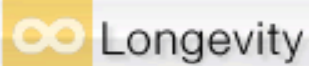
CD-R



CD-RW



Panasonic BD Media Archive Life



Stable, robust recording layer characteristics. Long-term data storage with an archiving life of 50 years.

The longevity of the Blu-ray Disc is backed by a polycarbonate substrate, which resists change over time, and highly stable recording layer characteristics. These features allow robust data retention in the Blu-ray Disc and make it ideal for long-term archiving of information such as engineering drawings, documents, digital video, and medical images.

Data saving characteristic of our 4X-BDR disc(dual layer)

