Flash FTL, File, or Database System

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Previews

- Flash Applications
- Flash Related S/W
- What's Future?

News On Flash

■ Storage (2007)



SSD Related

Flash Applications



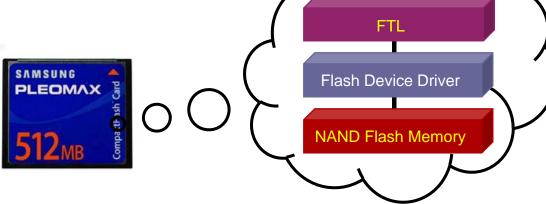




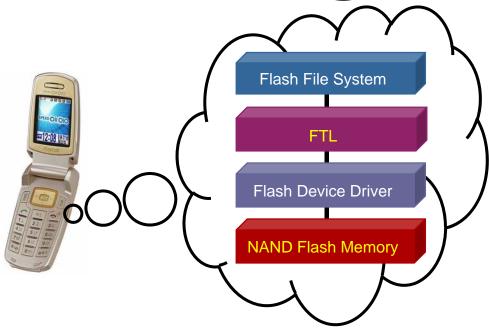


Flash Related S/W

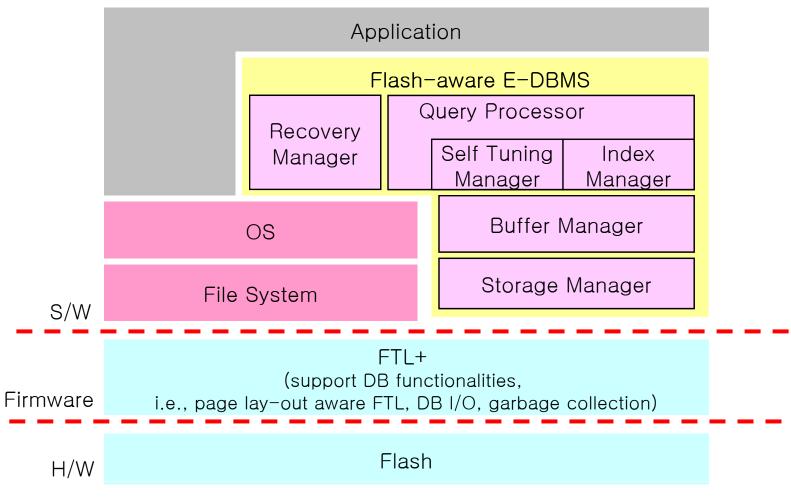
- External Memory Card
 - FTL is required



- Embedded Flash Chip
 - FTL and File System are required



Flash S/W Architecture



Source: IT Leading R&D Support Project flash DB group

Flash FTL, File, or Database System

FTL

- Technologies: Mapping, Wear-Leveling, Security
- Hot-DL (2009), LSTAFF*
 (2009), EAST (2008), PORCE
 (2008), STAFF (2007), FAST
 (2007), SSFTL (2002), SSR
 (2001?), ...

File System

- Technologies: Security, Efficiency
- TFS (2001?), Log Based (1995)

Database System

- Technologies: Storage Manager, Buffer Manager, Query Processing, Indexing
- IPL (2007), BFTL (2004)