

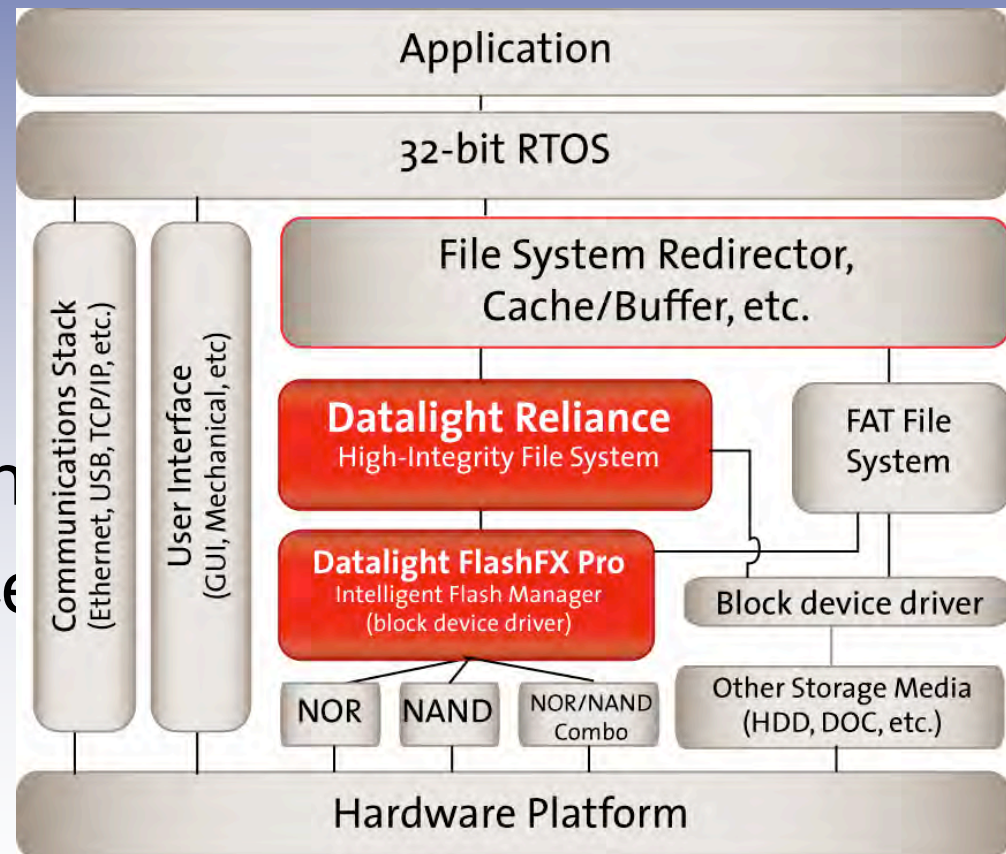


Embedded Applications

Necessary Components for Reliability

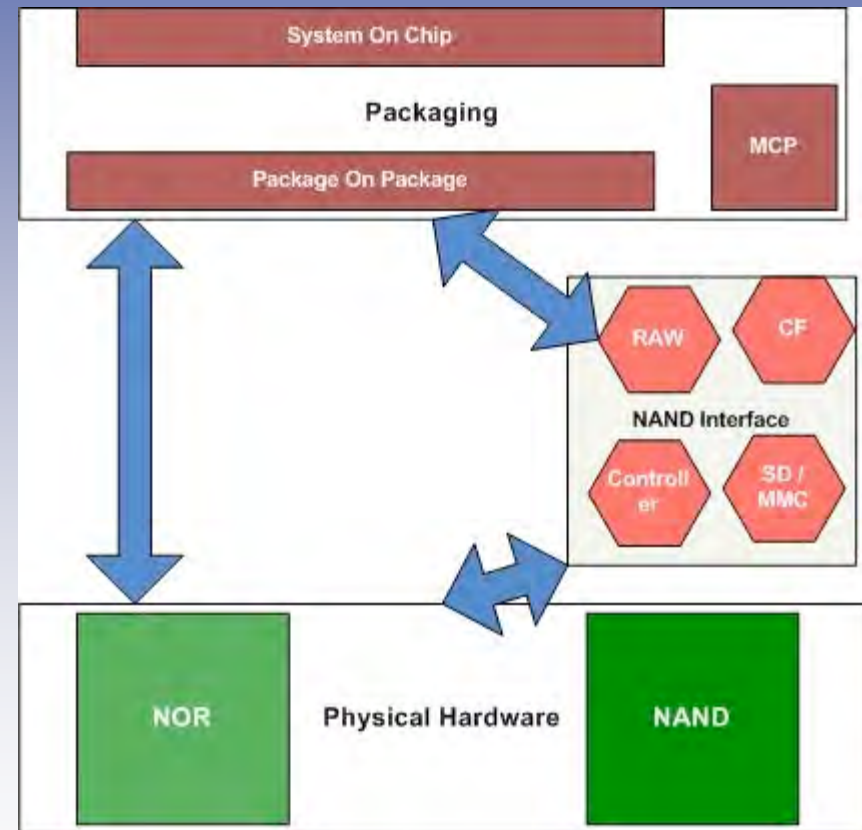
Layers between the Application and the Flash Memory

- Application API
- File System API
- OS Kernel
- Flash Interface
- Flash Management
- Hardware Interface



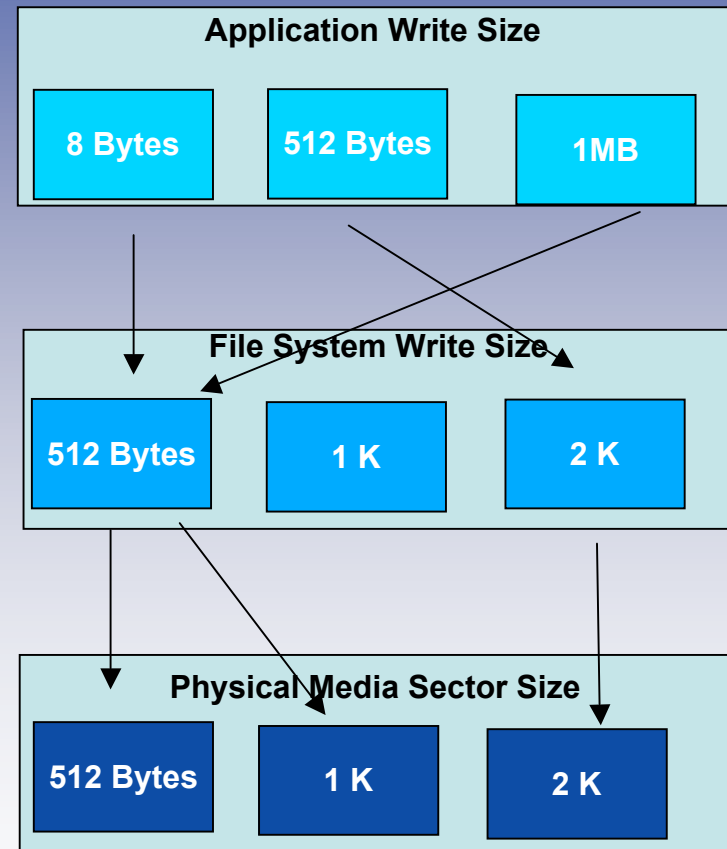
Design Considerations

- Flash Technology
 - NOR
 - NAND
- Combining Technologies
 - MCP
 - SOC
- NAND Interface
 - Compact Flash
 - SD
 - NAND Controller
 - MMC



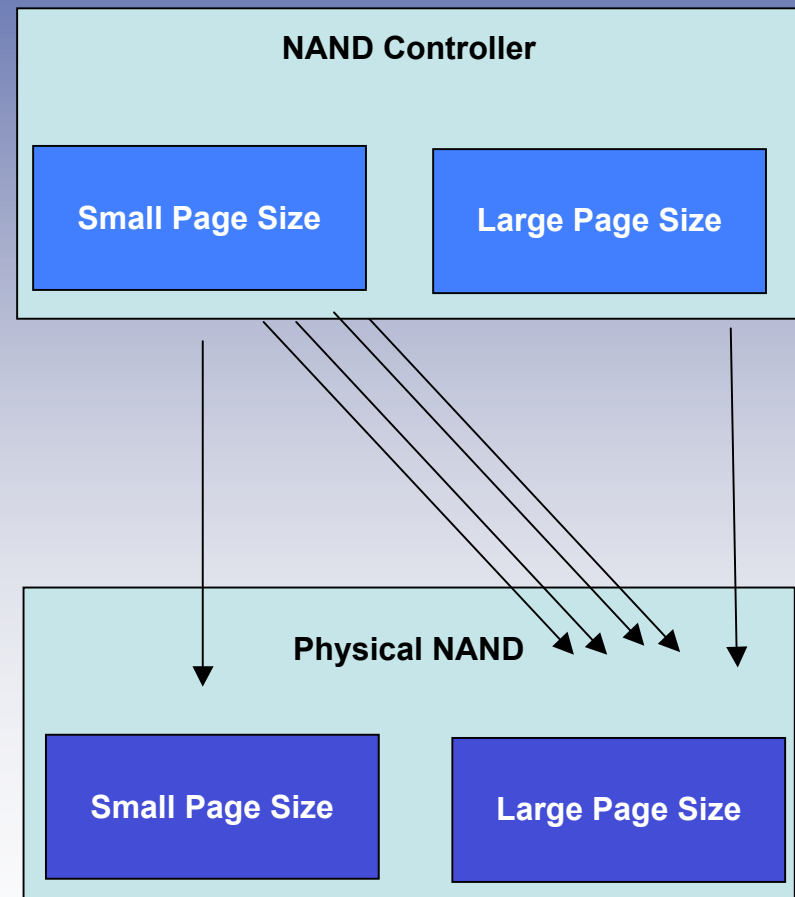
Design “Gotcha” 1

- File System Interface
 - Sector match
 - Application write size
 - File system write size
 - Number of media hits



Design “Gotcha” 2

- NAND Controller & Flash Mismatch
 - Controller type
 - Flash page size
 - Software sector size



Solution

- Flexible File System
- Flexible Flash Media Manager
- Aligned NAND Controller to NAND Flash

