

# Raw Flash: The Price and Performance Winner

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# Blunk Microsystems

Since 1995



## Dashboard Navigation System





# JPL Deep Impact





### Cell Phones





#### Flash Centric

API

**FFS** 

Flash



### Inherent Advantages

Better Garbage Collection Performance



# **Dirty Page Types**

- Overwritten Pages
- Deleted Files

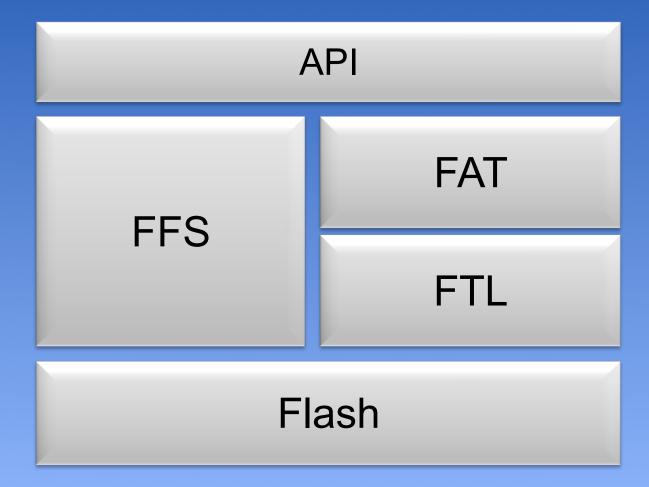


## **Enables Special Features**

- Links
- Directory Quotas
- Access Permissions

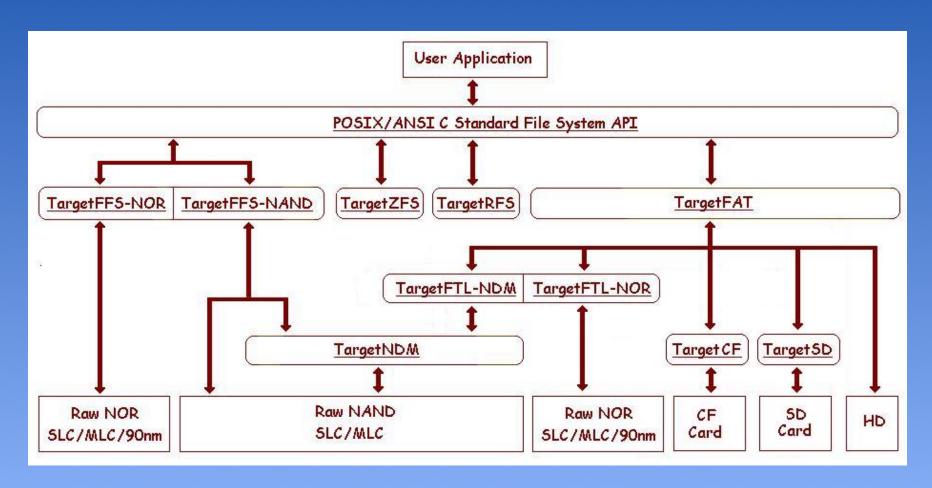


#### **FAT Also**





#### Full Spectrum of Products



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# Binary Image Tool

testmultiple.tfd - TFSImage	□×
File Help	
□ 😅 🔛   64 KB 🔻   32 Blocks 💌   Big Endian 💌 🔡	
Region 1 Region 2	
Volume to Create: NONE (left all 0xFF's) ▼	
Beginning Block #: 0 Ending Block #: 9 😩 Beginning Block #: 10 Ending Block #: 10	
Directory: C:\Testdir\TFSImageTest Directory:	
NOR Volume Type MBC (Multiple Bit Cell)	
Page Size: 512 ▼	
Compression Level: 0 Compression Level: 0	
Region 4————————————————————————————————————	
Volume to Create: TargetFFS-NOR ▼ Volume to Create: TargetFFS-NOR	
Beginning Block #: 11 Ending Block #: 20 💮 Beginning Block #: 21 Ending Block #: 31 💮	
Directory: C:\Testdir\TFSImageTest\DataFiles Directory: C:\Testdir\TFSImageTest\TestFiles	
NOR Volume Type SBC (Single Bit Cell) ▼ NOR Volume Type M18 (90nm NOR flash) ▼	
Page Size: 512 ▼	
Compression Level: 0 Compression Level: 0	
Ready	



## Flash Test System





#### Conclusion

Successful flash file systems can be implemented using raw flash chips.