



Revolutionary
Programming Technology

UFS Upgrade Kit

Expanding the market leading LumenX Platform to support
Universal Flash Storage (UFS)



Revolutionary Performance

- ✓ Engineered for ultra-fast UFS programming performance up to **160 MBytes/second** and beyond
2x faster programming performance over alternative UFS solutions
- ✓ **2x** faster download speed up to **50 MBytes/second**
- ✓ Larger image file size support up to **256 GBytes** and extensible to support up to **512 GBytes**

Revolutionary Value

- ✓ Architected to support the latest device technologies today and in the future **protecting and preserving customers' investment** in Data I/O's programming technology
- ✓ Expertly integrated into the PSV7000 and PSV5000 for **maximum socket capacity** for an easy and cost-effective upgrade
- ✓ Global Service and Support

LUMENX UFS Upgrade Kit

Specifications

Device Support

- UFS 2.0, 2.1 and 3.0 devices
 - 1 Lane Gear 2 (Rate A)
 - Extensible to 2 Lane Gear 3 (Rate A)
- eMMC Flash Memory 4.41 - 5.1
 - LumenX supports eMMC standard speed, HS, HS200 and HS400 modes
- SD
- SPI NOR
- MCUs

Device Interface Support

- SERDES LDVS

Performance

- Up to 160 MB/sec read +
- Up to 160 MB/sec write +
- Up to 50 MB/sec download

File Size Support

- 128 GB cache memory standard
 - Upgradable to 256 GB cache memory*
 - extensible up to 512 GB*
- *Cache memory upgrade purchased separately*

Device Capacity

- 8 UFS single socket per LumenX programmer

Network Interface

- 1 Gigabit (1000 BAST-T)

Adapter & Socketing Technology

- Standard burn-in sockets (5,000 - 10,000 insertions per socket)
- High Insertion Count (HIC) for BGA, TSOP, QFP (250,000 insertions per socket)

Programming Yield

- 99.5%

Changeover

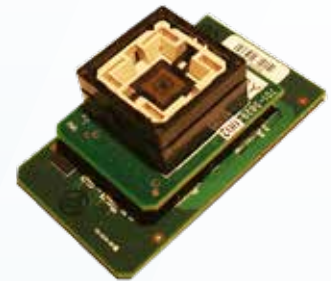
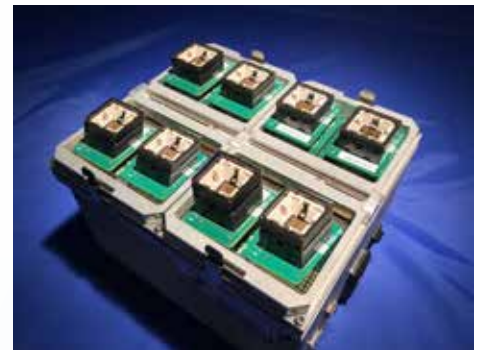
- Tool-less

LumenX Data Management Software (for standard PC interface)

- Role based user authentication to control access to create, modify and run programming jobs
- Version Control
- Read from Master
- Basic Serialization
- LumenX Help

Support Contracts

The first year of support for factory parts and labor warranty included in purchase price and can be extended via Annual Support Agreement renewal. The APS support program enables access to new & optimized algorithms, system software and LumenX Software updates and hardware support



Environmental & Regulatory Specification

Operating Temperature Range

- +10° to +30° C

Humidity

- ≤90%

Regulatory Compliance

- CE
- RoHS

System Integration

Automated Programming Systems

- PSV7000 with AH700
- PSV5000 with CH700

Maximum Socket Capacity

- 14 LumenX programmers for up to 112 UFS sockets in PSV7000
- 5 LumenX programmers for up to 40 sockets in PSV5000

Value Added Software/Hardware

- **Automotive Performance PAK includes**
 - Confirm Input Device
 - Tape Label Generator
 - Remote Monitoring
 - Version Control
- **Bar Code Scanning**
- **Command Line Interface**
- **Serialization**
- **ConneX® Smart Programming Software**

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