



MULTIMEDIA CARDS

MultiMedia™ Cards

The Dane-Elec Multimedia™ Card is highly integrated flash memory with serial and random access capability. Multimedia™ Card is very small, removable flash storage that is an ideal solution for portable battery powered devices such as audio players, organizers, palmtops, electronic books, encyclopedia and dictionaries.

Using very effective data compression schemes such as MPEG, the MultiMedia™ Card will deliver enough capacity for all kinds of multimedia data: software/programs, text, music, speech, images, video etc.

Main Features:

- ❑ 16, 32, 64, 128 MB capacity
- ❑ Fast download time
- ❑ Lifetime guarantee
- ❑ Low power consumption
- ❑ Wide operating range for temperature



MultiMedia™ Card Specifications

MultiMedia™ Card System Standard Compatibility

- ✘ System specification version 2.11 compliant
- ✘ SPI Interface supported
- ✘ Block and partial block read supported (Command classes 0 and 2)
- ✘ Stream read supported (Command class1)
- ✘ Block write and erase supported (Command classes 4 and 5)
- ✘ Group write protection (Command classes 6)
- ✘ Stream write supported (Command classes 3)
- ✘ Password data access protection
- ✘ Small erase block size of 512 bytes, tagged erase supported
- ✘ Read block size programmable between 1 and 2048 bytes
- ✘ Up to 100,000 erase cycles per block
- ✘ $V_{CC} = 2.7\text{ V to }3.6\text{ V}$ operation voltage required
- ✘ No external programming voltage required
- ✘ Damage free powered card insertion and removal
- ✘ 4kV ESD protection

Part Number	Capacity (MB)
DA-MMC-128	128
DA-MMC-64	64
DA-MMC-32	32
DA-MMC-16	16

High Speed Serial Interface with Random Access

- ✘ Read Speed: sustained: 13.7 Mbits/s (multi-block read) / burst (one block): 20 Mbit/s
- ✘ Write Speed: sustained: 3.2 Mbits/s (multi-block write to pre-erased sectors)
burst (one block): 20 Mbit/s
- ✘ Up to 10 stacked card (at 20 MHz, $V_{CC}=2.7\text{ to }3.6\text{V}$)
- ✘ Access time: 256 μs (max) (at 20 MHz, $V_{CC}=2.7\text{ to }3.6\text{V}$, random byte access (Typical case without BCC error correction))

Low Power Dissipation

- ✘ High Speed: 80 mW (max) (at 20 MHz, $V_{CC}=2.7\text{ V}$)
- ✘ Power save: 0.1 mW (max) (at 0 Hz, $V_{CC}=2.7\text{ V}$ (in stby state))

For more information on Dane-Elec Flash Memory products, call us at 888-451-3263

Dane-Elec Memory
15770 Laguna Canyon Road, Suite 100 • Irvine, CA 92618
Tel: 888-451-DANE (3263) • Fax: 949-727-9083
Email: sales@dane-memory.com • www.dane-memory.com

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