

DFCS

Digital Fire Control System



On-Platform Hardware & Fire Control Software

General Dynamics provided the world's first digital fire control system for the US M1 main battle tank, and continues to support fire control applications for major combat platforms.

Incorporating extreme environment hardware, fire control software, and systems integration expertise, the Digital Fire Control System (DFCS) is proven to withstand the battlesfield's most extreme environments.

Compliant with Advanced Artillery Tactical Data Systems, our DFCS offers indirect fire control and system integration capabilities.

Features:

- Battle proven hardware and systems for extreme environments
- Indirect fire control and system integration capabilities
- Designers and manufacturers of fire control displays and computers
- Compliant with Advanced Artillery Tactical Data System
- Currently deployed in theatre

Fire Control Computer

- Intel® Pentium® III Mobile Module 700 MHz Processor, with MMX technology
- 256 KB L2 cache on-die
- Up to 512 MB of Synchronous DRAM
- 4.0 GB solid state hard disk drive in 2.5" form factor
- Optional FLASH disk (up to 288 MB)
- 2 MB video memory
- Software programmable watchdog timer up to 32 seconds
- Fully IEEE 1101.2 conduction cooled CCAs
- MIL-STD 1275 28 VDC Power
- 11 RS422 serial ports(3 S/W reconfigurable)
- USB 1.1 port
- LVDS and NTSC video
- TACLINK 3000 (internal)
- Spare PCMCIA slot (internal)
- Spare PMC slot
- Spare Compact PCI peripheral slot
- 8-bit Digital I/O
- 1 parallel port
- Commercial connectors behind access panel for:
 - VGA monitor
 - PS-2 mouse
 - PS-2 keyboard
- BIT Serial Channel Access
- Ethernet 10/100 BASE-T
- Operating Systems Supported:
 - VxWorks
 - QNX
 - Windows 9x, ME, 2000, NT, NTE, XP
 - SCO Server 5
 - Solaris x86 2.x
 - Linux

Chief of Section Display (CSD)

- 6.4" 640" x 480" (64 K colors) AMLCD flat panel
- Sunlight Viewable
- Programmable soft and hard keys
- NVG compliant
- 5 ft. drop

Gunner's Display

- 4 x 2 160 x 80 inches Pixel Electroluminescent Flat Panel Display
- Sunlight Viewable
- User programmable alpha-numeric text or graphics

Environmental Specifications

- Operating Temperature: -46°C to +49°C (-51°F to +120°F)
- Storage Temperature: -51°C to +71°C (-60°F to +160°F)

MIL-STD-461D

- Electromagnetic Interference, Ground, Army
- TEMPEST (optional)

MIL-STD-810E

- Shock and Vibration for Wheeled and Tracked vehicles
- Gunfire Shock
- Humidity
- Sand and Dust
- Blowing Rain
- Fungal Growth
- Salt-Fog
- Solar Radiation
- Altitude (Operating, Storage and Rapid Decompression)
- NBC Compliant
- 110 lb PSI Washdown
- 1.5 metre Immersion
- 50 KV ESD
- EMP
- Lightning