# INTEGRATED CORE PROCESSOR



## Open System Architecture (OSA) Secure Processing

The Integrated Core Processor (ICP) is an OSA-based processing technology providing unmatched modularity and software partitioning flexibility for military processing applications. Based upon L-3 Display Systems' Prism architecture and technology, the L-3 DS ICP allows independent software development by Primes and User/ Operators within a time and space partitioned environment. The L-3 DS ICP is currently fielded on the F-35 Lightning II Panoramic Cockpit Display Subsystem and the C-130J Special Mission Display Processor programs.



## **KEY FEATURES & BENEFITS**

- · Open architecture design
  - Power PC processing modules
  - Graphics/video processing
  - Green Hills® INTEGRITY®-178B / MILS real-time operating system
  - ARINC 653 partitioned environment
  - OpenGL Embedded System-Safety Critical (ES-SC) graphics
- Modular
  - I/O tailorable for unique customer applications
  - Growth provisioning
- Eliminates federated boxes through embedded applications and functions
- · Unmatched situational and information awareness
- Weight and power savings with reliability/LCC improvement
- Redundancy in a single LRU

# High Performance Computing and Visualization Platform that Supports:

- » Integrated Cockpit Systems
- » Mission Processing
- » Communications Processing
- » Advanced Video Processing



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### **SPECIFICATIONS**

	1 ATR SHORT	1 ATR LONG
TWO HIGH PERFORMANCE POWER SUPPLIES		
Input Power	28VDC	28VDC
Voltage Range	16-29 Volts	16-29 Volts
Transient Suppression	Included	Included
Power Dissipation	300 Watts (max.)	450 Watts (max.)
PHYSICAL DESCRIPTION		
Weight	36 lbs	50 lbs (max.)
Dimensions	10.2"(w) x 7.6"(h) x 12.3"(d) w/Fan Pack: 10.2"(w) x 7.6"(h) x 13.5"(d)	10.2"(w) x 7.6"(h) x 19"(d) w/Fan Pack: 10.2"(w) x 7.6"(h) x 19.6"(d)
ENVIRONMENTAL PERFORMANCE		
Temperature	Operating: -40°C to +55°C, +71°C (intm.) Storage: -57°C to +85°C	Operating: -40°C to +55°C, +71°C (intm.) Storage: -57°C to +85°C
Shock	20 Gs (basic), 40 Gs (crash)	20 Gs (basic), 40 Gs (crash)
Altitude	0-50,000 ft	0-50,000 ft
Reliability	7,000 hours (AIC)	5,000 hours (AIC)
EMI/EMC	MIL-STD-460, CE102, CS101, 114-116, KE102-103, RS103, lightning	MIL-STD-460, CE102, CS101, 114-116, KE102-103, RS103, lightning
PROCESSING		
CPU	Up to 2 System Processor/Display Processor Modules:  System Processor:  > 2900 DMIPS, 1MB L2 Cache  512MB DRAM, 256MB Flash  128KB NOVRAM  Display Processor:  > 2200 DMIPS, 1MB L2 Cache  256MB DRAM, 128MB Flash	Up to 3 System Processor/Display Processor Modules:  System Processor:  > >2900 DMIPS, 1MB L2 Cache  > 512MB DRAM, 256MB Flash  > 128KB NOVRAM  Display Processor:  > >2200 DMIPS, 1MB L2 Cache  > 256MB DRAM, 128MB Flash
Video / Graphics	Up to 2 Video/Graphics Processors:  • Supports graphics only, video only, graphics overlay on video  • Supports standard PC video & HDTV formats up to 2560x1600	Up to 4 Video/Graphics Processors:  Supports graphics only, video only, graphics overlay on video Supports standard PC video & HDTV formats up to 2560x1600
SOFTWARE		
Operating System	Green Hills® INTEGRITY®-178B / MILS	Green Hills® INTEGRITY®-178B / MILS

### **Display Systems**

1355 Bluegrass Lakes Parkway Alpharetta, GA 30004-8458

Tel: 770.752.7000 Fax: 770.752.5525

Email: displays.l-3commsales@L-3com.com

www.L-3com.com/Displays



## **Display Systems**

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