



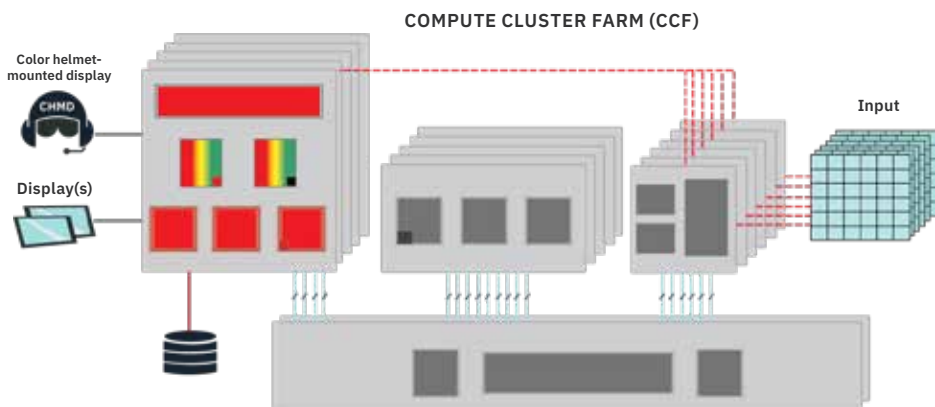
L3HARRIS™
FAST. FORWARD.

NEXT-GENERATION COMPUTE CLUSTER FARM AND PROCESSING SOLUTIONS

HARDWARE PROCESSING SOLUTIONS

Maintain near-peer superiority through flexible and genuine open hardware and software solutions

L3Harris processing hardware is built with a mission-centric ethos focused on the need to deploy best-of-breed skills and capabilities faster than previously possible.



MISSION-CENTRIC ETHOS:

- > **Genuine open** – All possible application programming interfaces (APIs) conform to popular open-system standards to allow severability at and below “the box.” Our solutions allow complete customer access to modify and reconfigure hardware at multiple physical and software levels – with or without the involvement of L3Harris.
- > **Multilevel security (MLS) & cross-domain security (CDS) capable** – Solutions are available at single level and MLS/CDS depending upon system requirements.
- > **High performance** – Digital backbone. Best-of-breed solutions leveraging 40-plus years of processing expertise, as well as the best third-party commercial off-the-shelf hardware the industry has to offer.
- > **Multifunction capable** – All L3Harris Chrysalis solutions are built to support federated single-function or multifunction implementation.
- > **Airworthy** – L3Harris’ solutions are built to conform to the most stringent safety-critical standards.
- > **Maintainable** – Solutions are value aligned and designed to be reconfigured during regular refresh cycles with functionally identical or improved hardware population.
- > **System integration and test** – All L3Harris hardware includes recourses to rapidly integrate and test mission-critical functions.
- > **Human factors** – Hardware is built to eliminate potential maintenance-repair-overhaul related damage. Examples include extraction levers and hardware hard-stops.
- > **Thermal/power management** – Exhaustive studies are available to ensure desired implementations have a manageable thermal and power profile.

MULTIFUNCTION PROCESSOR

Support input/output intensive capabilities with the 6U variant of our Multifunction Processor

Our Multifunction Processor can be rapidly populated with a variety of 6U circuit card assembly to support high performance networking, processing and skill hosting. The larger form factor of 6U offers unique implementation options within a CCF architecture.

FEATURES

- > 6U VPX
- > MLS end point, CDS
- > Encryption
- > Emulation and demonstration system



DISPLAY AND SAFETY PROCESSOR

Safety-critical human-machine interface (HMI) processing box

L3Harris’ Display and Safety Processor is a safety-critical HMI system empowering operators to execute mission objectives. It drives the safety-critical displays from the multifunction processor CCF data as well as providing additional safety-critical processing resources for other mission needs.

FEATURES

- > 3U, 2x5 slot compact form factor
- > Air cooled
- > High-maturity safety and reliability artifacts
- > TRL7







CHRYSLIS™

NEXT-GENERATION PRODUCT LINE

Chrysalis is a portfolio of durable L3Harris intellectual property used to rapidly integrate semi-custom processing solutions. Our portfolio allows significant reduction in non-recurring engineering cost and risk to schedule. L3Harris Chrysalis reconfigurable processing hardware supports both dedicated use and multifunction implementation leveraging best-of-breed engineers, hardware and tools. All hardware within the Chrysalis ecosystem share common open and published APIs to allow interchangeable components.

Increments can be used as published, repopulated or semi-custom, which leverages existing and mature intellectual property. Baseline hardware implementations available:

HARDWARE OPTIONS				
				
	Arrowhead™	Gatekeeper™	Harvester™	Metalmark™
Physical dimensions	4.88” (W) x 12.62” (L) x 7.62” (H)	4.88” (W) x 12.62” (L) x 7.62” (H)	10.12” (W) x 12.52” (L) x 7.62” (H)	Tailorable instantiation
Weight (approximate)	37.25 lbs dependent upon population	37.25 lbs dependent upon population	74.50 lbs dependent upon population	Tailorable instantiation
Dissipated power	1,200 W peak 800 W sustained at +28 VDC input	1,200 W peak 800 W sustained at +28 VDC input	3,000+ W peak	Tailorable instantiation
Number of slots	10, 3U VPX	10, 3U VPX	17, 3U VPX	5+, 3U VPX
Cooling	Air	Air	Liquid	Air
Physical application	General multifunction processing	Multifunction processing and GP/GPU capability	High-performance multifunction fixed-wing applications	Market-aligned single or multifunction solution
MLS implementation type	MLS and CDS capable	MLS and CDS capable	MLS and CDS capable	MLS and CDS capable
Other standard measures of performance	Up to 100 Tfpls	25 Gbps/lane 100 Gbps ethernet on backplane and fiber interfaces	Up to 200 Tfpls	Dependent upon capability need

INTEGRATION SERVICES

L3Harris provides genuine open framework that leverages the latest innovations from across the industry without hidden sources of risk and vendor lock. This framework allows us to offer skill and capability integration as a service, leveraging mandated and provided tools. Integration by L3Harris is “golden-screw” free to allow customers to perform their own integration.

The next-generation Chrysalis product line provides industry-leading flexibility, as well as rapid integration and flight qualification, to meet mission-critical needs.

BENEFITS

- > Widely adopted OpenVPX and SOSA profiles provide many hardware options
- > Superior architecture unlocks platform to competitive innovation and simplifies integration
- > Rapid innovation and integration allow customers to maintain capability overmatch while reducing costs
- > Genuine-open system maximizes flexibility, scalability and upgradability

FEATURES

- > Liquid or air cooling for harsh environments
- > MLS/CDS capable
- > Certifiable to all criticality levels
- > Futureproof



Contact chrysalis@L3Harris.com for more information.

FAST. FORWARD.

Next-generation Compute Cluster Farm and Processing Solutions

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Nonexport-controlled Information

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.

