L3HARRIS®

FAST. FORWARD.

THE CHRYSALIS
DIFFERENCE

CHRYSALIS™

Chrysalis is an L3Harris engineering approach used to rapidly integrate processing solutions. The methodology allows significant reduction in non-recurring engineering cost and risk to schedule. L3Harris 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 application programming interfaces (API) to allow interchangeable components.

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 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) and 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 and 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.

REPRESENTATIVE SOLUTIONS

Physical dimensions	12.70" (W) x 12.36" (L) x 8.30" (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)	51 lbs fully populated	37.25 lbs dependent upon population	74.50 lbs dependent upon population	Tailorable instantiation
Dissipated power	Up to 1200 W sustained	1,200 W peak 800 W sustained at +28 VDC input	3,000+ W peak	Tailorable instantiation
Number of slots	8 slot, 3U VPX	10, 3U VPX	17, 3U VPX	4+, 3U VPX
Cooling	Air	Air	Liquid	Air
Physical application	Multifunction processing and GP/GPU capability	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	Dependent upon capability need	25 Gbps/lane 100 Gbps ethernet on backplane and fiber interfaces	Up to 200 Tfpls	Dependent upon capability need

CHRYSALIS ADVANTAGES

Secure, Multi-domain, High-Performance Edge Computer

BENEFIT

Adaptable high performance compute to sustainably outpace evolving threats

PROOF

> L3Harris legacy of innovation – 37X-fold processing power increase from F-35 TR-2 to TR-3

> L3Harris processors are enabling secure multi-domain operations on today's most advanced weapon systems

> Holistic security solutions including information assurance (IA), anti-tamper and multi-level security (MLS) and cyber

> Modular, open and composable architecture allowing L3Harris to leverage the latest technologies across industry to meet the most demanding multi-domain capabilities with shorter integration times

Modular, Open and Digital Design

BENEFIT

Speed and agility to rapidly define, develop, deliver and iterate

PROOF

> Modular, open-systems product line allows L3Harris to rapidly tailor solutions to deliver bespoke performance with off-the-shelf components

> Reduced time to market for initial deployment and upgrades

> High degrees of reuse and adaptability reduce lifecycle cost

> Digital engineering for hardware and software design

Advanced Thermal and Integration Expertise

BENEFIT

Maximum compute performance when and where you need it most

PROOF

> Legacy of L3Harris COTS ruggedization

> L3Harris integration and advanced thermal technologies keep electronics running cooler enabling twice the processing density over traditional designs

> 40-plus years of providing integrated processors that survive in DoD's most demanding operating environments with fielded reliability that meets or exceeds reliability predictions

INTEGRATION SERVICES

L3Harris provides genuine open framework that uses 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 or ground qualification, to meet mission-critical needs.

Contact chrysalis@L3Harris.com for more information.

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