

A photograph of a satellite in space, viewed from a distance. The satellite has a large rectangular solar panel array and a complex structure. It is positioned against a dark background with a bright light source, possibly the sun, creating a lens flare effect. The satellite is oriented vertically, with the solar panel array extending upwards. The background is a gradient of dark blue and black, suggesting the vastness of space. A bright cyan vertical bar is on the left side of the image, and a horizontal cyan bar is at the bottom right.

Space L3 Switch

20+ years of flight heritage



ECLIPTIC

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ECLIPTIC

A quality space avionics and sensor systems company founded in 2001 based on Pasadena, CA

Ecliptic's product line includes Imaging and Video Acquisition and Processing Systems, as well as Payload and Experiment Controllers, Sequencers, and Data Routers/Switches and Managed Storage systems.

Space L3 Switch

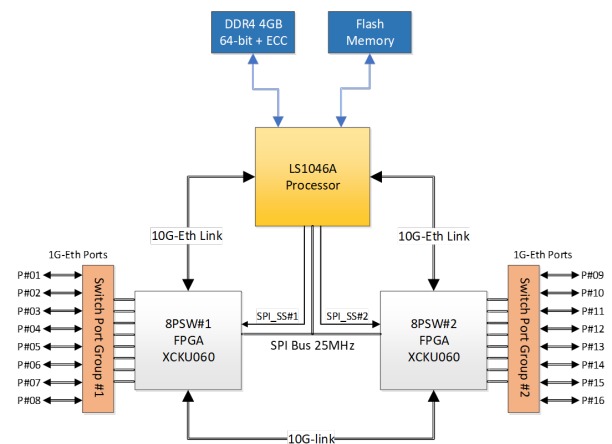
The Layer-3 Switch is a 16-port Gigabit Ethernet (GbE) switch designed, tested, and qualified to meet the challenges of the harsh environment of space.

Contracted supplier of the Layer-3 SWITCH for the Habitation and Logistics Outpost (HALO) for Lunar Gateway, part of NASA's Artemis program



Feature Overview

- › Multi-Layer Switch (L2 switching and Routing) with 16 ports of 1G
- › Full wire-speed on all ports and all Ethernet frames sizes.
- › Port-based VLAN support thru 802.1Q Standards. Up-to 4069 VLAN-ID can be managed.
- › Spanning Tree Protocols: RSTP and MSTP.
- › Packet Prioritization; Up to 8 level based on L2 (VLAN Tag) or L3 (DSCP field).
- › Traffic Control Flow: Packet rate limitation by priority levels.
- › Static Multicast routing both at L2 and L3.
- › Virtual Router Redundancy Protocol (VRRP)
- › Switch access through SSH, SNMP and sFTP to allow configuration and remote management.
- › Automatic health monitoring logs generation



Ecliptic Avionics Heritage

- › **+20** years of flight heritage
- › **+150** successful missions
- › **+400** contracts since 2001
- › Participation in major space programs from **Space Shuttle, ISS, to Artemis Gateway.**

Product Grades

- › **High-Rel & Rad-Hard**
 - › Level 1 & Level 2 parts (FPA Class 3)
 - › >15-years LEO, >10-years GEO, Lunar, cislunar
- › **Rad-Tolerant**
 - › Level 2 & Level 3 heritage parts
 - › >5-years LEO, 2-3 years GEO, lunar missions
- › **Standard**
 - › Level 3 Parts (COST) with flight heritage
 - › 2-3 years LEO, 1 year GEO missions

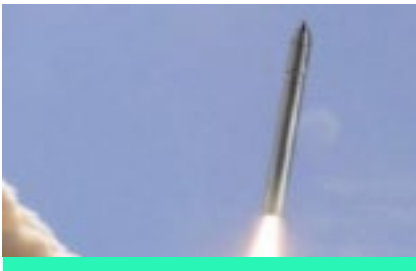
Data management & Image and video systems



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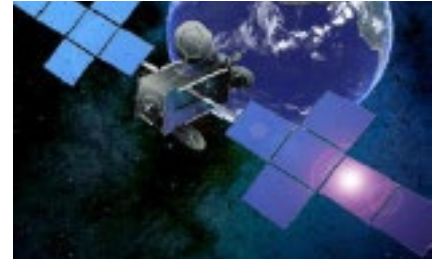
Ecliptic Notable Projects



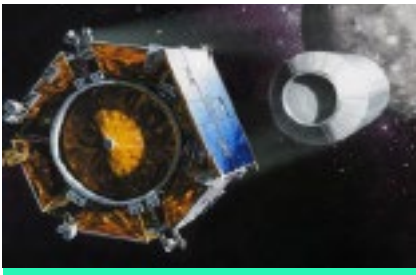
> 30 launches | Three US customers
2005+ | Missile defense
Video, payload control, data handling



Various | ~20 missions 2005+ |
Rockets and spacecraft Video, payload
control, data handling



10 GEO sats | Three US customers
2007+ | Comsat, tech-demo Video,
expt. control



LCROSS | NASA Ames 2006-2009 |
Lunar impact Complete payload control



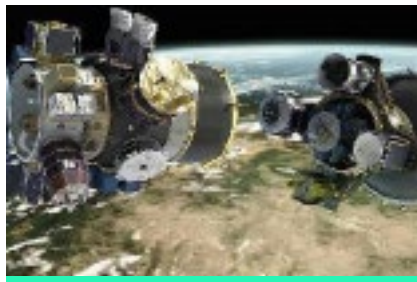
GRAIL A, B | JPL 2008-2012 | Lunar
gravity Video and imaging



> 12 Cygnus | Orbital/NG 2010+ | ISS
cargo Video, expt. control



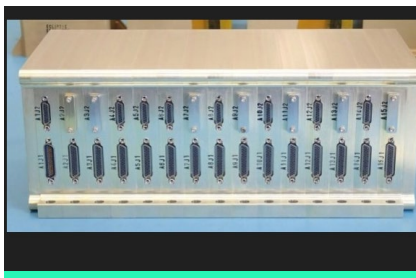
ROSA on ISS | DSS 2012-2017 | Array
demo Complete expt. control



SHERPA | Spaceflight 2016-2018 |
Rideshare 60 of 64 deployments



ASTERIA | JPL 2016-2017 | Exoplanets
Imaging electronics



Various missions
2019+ | Experiment Controller
Complete Experiment Control
Data Acquisition Controller and
Power Control Units



2 LEOs, 2 GEOs | MELCO 2017+ |
Comsat, tech-demo Video, expt. Control
(launching 2021+)



Lunar & cislunar | Nine missions 2020+
| Cargo and crew delivery, logistics
Payload control, video (launching
2021+)

**Data management & Image
and video systems**



ABOUT US

Ecliptic is a space avionics and sensor systems company with 20+ years flight heritage, 100+ space mission and 500+ camera systems launched. The company has a long history of producing high reliability and radiation tolerant space avionics and imaging solutions.

From its facilities in Pasadena, California, Ecliptic develops, manufactures, and tests modular systems embedded in satellites, rockets and space vehicles for situation awareness, vehicle inspection and earth observation imaging, data management, storage and networking modules, experiment and payload data acquisitions and control, and sequencing, actuation, and deployment control and capture. Ecliptic's typical systems range from heritage-based COTS to 15-yr Space Grade systems allowing its customers to optimally configure their different mission needs.

Past missions includes launchers and spacecrafts for LEO, MEO, GEO, cislunar and lunar orbits and other exploration vehicles.

Ecliptic is part of **ARQUIMEA**, a Spanish technology company that operates globally in technically demanding sectors, such as the aerospace, defence, science, biotechnology and fintech sectors.

With over 18 years of experience, ARQUIMEA collaborates in the space sector with the leading space agencies, such as NASA and the ESA, leading companies in traditional space and New Space, international consortia, universities and research centers.

ARQUIMEA is a comprehensive supplier with the capability to develop and manufacture entire satellites, systems, subsystems and critical components for space.

For more info:

eclipticenterprises.com

arquimea.com