

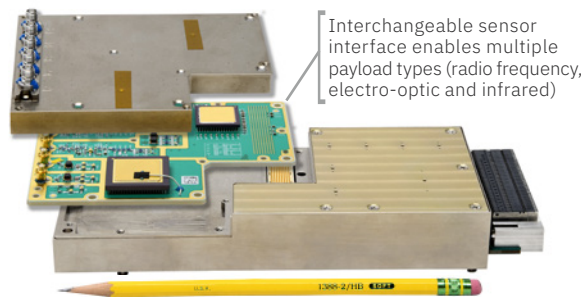


RECONFIGURABLE MULTIMISSION PAYLOAD

Software-defined platform for satellite missions

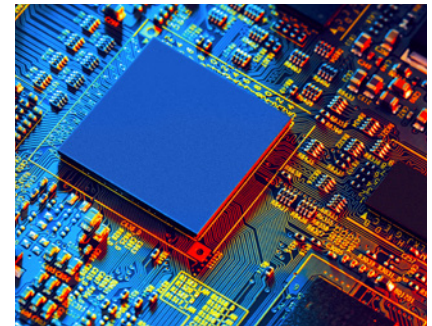
Ground mission planners reconfigure and change satellite payload functionality—even after deployment into space—with the L3Harris micro software-defined payload (μSDP). With multimission capability, the payload enables commercial companies to accelerate the pace of space business opportunities and government agencies to capitalize on commercial satellite operations or maximize their own proprietary space resources.

More than 175 L3Harris reconfigurable multimission payloads are now serving government and commercial missions. Among these are the 81 ADS-B receiver payloads on board the Iridium NEXT satellite constellation, enabling Aireon’s real-time air traffic surveillance system. The new generation of L3Harris reconfigurable multimission payloads are meeting reduced size, weight and power constraints to bring high functionality to L3Harris small satellites.



SPECIFICATIONS

PARAMETER	UNIT	VALUE
Mass	kg	0.84 (1.85 lbs)
Size	in	3u SpaceVPX 9.025 X 4 X 1.76
Radio frequency (RF) mezzanine (IBW)	MHz	750
RF mezzanine (Fs)	GHz	≤2
Reliability		.995 success (3 year) (LEO)
Radiation tolerance		TID: 30 Krad(Si) SEL: <1 latchup/7 years Heavy ions LET: >15 MeVcm ² /mg 5 (standby)
Power	W	35 (typical) 65 (maximum)
Temperature	C	-20° to +50°
Fault tolerance		Patent pending latchup mitigation Configuration scrubbing
Onboard processing	GFLOPS	350



APPLICATIONS

- > Small satellites
- > Hosted payloads

HIGHLIGHTS

- > Maximizes the value of smallsats and hosted payloads via a flexible, software-defined architecture
- > Is reconfigurable on orbit to meet changing mission needs
- > Enables autonomous control and switching of mission applications in seconds
- > Supports user-developed mission apps with a software development environment and module library

L3Harris Reconfigurable Multimission Payload

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