GENERAL DYNAMICS Mission Systems

Scorpion

Brimstone control solution for land vehicle and helicopter launch platforms



The Scorpion design is the result of more than 40 years pedigree in the design, development, certification and support of safety critical weapon control solutions

Operational Features

- Affordable, rugged, low size, weight and power Brimstone control solution for land vehicle and helicopter launch applications
- Flexible Ethernet and MIL-STD-1760 interfaces for simple integration with fire control systems
- Each unit provides control of up to six Brimstone missiles. Multiple units can be used together to expand the number of missiles
- A rugged, low size, weight and power, ITAR free Brimstone control solution
- Simple installation no cooling provisions required in most applications
- Operation from 18-31 VDC power supply
- Robust, proven safety architecture developed from our airborne stores management systems

Technical Information

Scorpion is a development of our distributed stores management computer (DSMC), the key component of our airborne distributed stores management product family.

Technical Characteristics		
Fire control system interfaces	10/100 Base T Ethernet and MIL-STD-1760	
Weapon system interfaces	6 Brimstone interfaces per unit	
	Controls for external high power switching	
Mass (kg)	<2.2Kg	
Power consumption (W)	<22W	
Dimensions LxWxH (mm)	246 x 104 x 71	
Connectors	2 x 85 pin Glen Air "Mighty Mouse" sockets (input/output)	
	1 x 7 pin Glen Air "Mighty Mouse" plug (power)	
Power supply	18-31 VDC	
Processor	V1	V2
	NXP MPC8308 PowerQuicc II Pro 400MHz	NXPT1014 CPU Power Architecture 1.4GHz
	512 Mbytes DRAM	4GB DDR4 RAM 1600MHz
	128 Mbytes NOR FLASH 32 Mbytes SPI FLASH	1GB NAND Flash Storage
	32 Kbytes NVRAM	Secondary 32MB NOR SPI Flash Storage
	66 MHz PCI bus speed	66MHz PCI Bus Speed
	Optional upgrade for second PMC form factor processor	
Temperature/cooling unit	-40 degrees C to +50 degrees C (convection-only cooled), +70 degrees C (baseplate cooled)	
	MIL-STD-810H method 520.5 (combined environments)	
Storage	-55 degrees C to +85 degrees C	
Vibration limits	MIL-STD-810H test 514.8 Procedure I Annex D-I (STANAG 4370 vibration levels)	
Shock limits	MIL-STD-810H method 516.8 Procedures I and VI	
Salt fog	MIL-STD-810H method 509.7	
Fungus/mould growth	MIL-STD-810H Method 508.8	
Sand and dust	MIL-STD-810H method 510.7	
Altitude	-1,500ft – 48,000 ft (-458 – 14,630 m)	
	MIL-STD-1810H method 511.7	
Drip	MIL-STD-810H 506.6 Procedure 3	
EMC	MIL-STD-461G CE102, CS101, CS114, CS115, CS116, RE102 and RS103	

* Unit can be qualified to DEF STAN 00-035 (Environmental Handbook for Defence Materiel) or equivalent land vehicle standards. Please contact us to discuss your particular qualification requirements.



CANADA gdmissionsystems.ca info@gd-ms.ca

UNITED KINGDOM gd-ms.uk enquiries@gd-ms.uk



©2020 General Dynamics. All rights reserved. General Dynamics reserves the right to make changes in its products and specifications at anytime and without notice. All trademarks indicated as such herein are trademarks of General Dynamics. All other product and service names are the property of their respective owners.