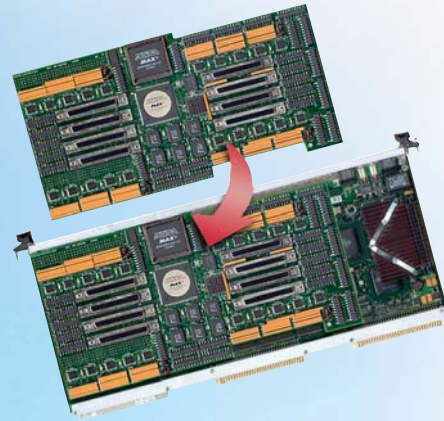


COMMAND DATA SECURITY INTERFACE

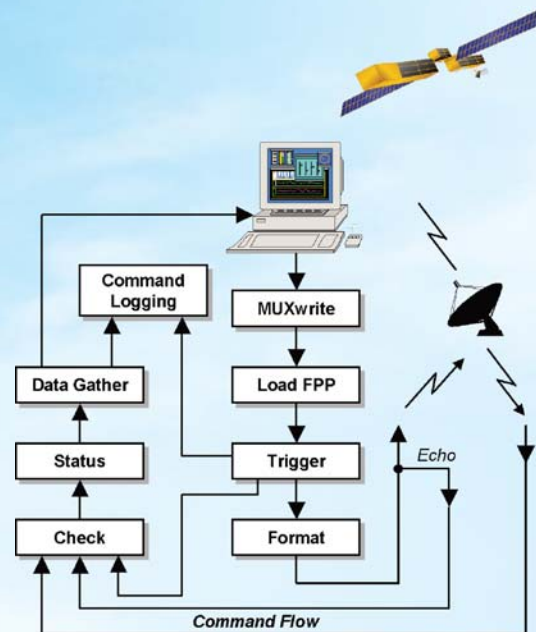
FDS523-64



The Command Data Security Interface (CDSI) module provides the data and control function between the system and up to eight encryptor/decryptor (KG) units. In combination with other standard system features, this module provides remote control of a variety of KG units as well as transmission and reception of serial command data in SGLS ternary (1, 0, S) or other formats. The module includes a CDSI mezzanine and a host Field Programmable Processor 4 (FPP4). The FPP4 allows users to develop algorithms in C for authorization, transmission, and validation of command sequences. The CDSI mezzanine provides the electrical and digital interface to encryptors/decryptors for keys, setup, control, status, and data transmission.

KEY FEATURES

- Transmits/receives SGLS ternary (1, 0, S) or other data formats in a real-time environment
- Provides capability for real-time command formatting/transmission and validation/verification using custom algorithms
- Accepts data from custom human-machine interface routines in the workstation; returns status and error messages to standard or user displays
- Provides user-programmable 250 Hz to 2 MHz clock signal
- Uses the host Field Programmable Processor 4 (FPP4) module for running the algorithm to control the CDSI and other applications



Excellence You Can Measure



COMMAND DATA SECURITY INTERFACE

FDS523-64 SPECIFICATIONS

Inputs/Outputs

CDSI to KGRS-422 differential transmitters and receivers
 Ternary I/O Rate128K+, determined by KG red clock
 FPP to MUXbus II750 kwords/sec; 32-bit in System 550

Control/Monitor Functions

Units SupportedKGT 61, KGR 61, KGT 62, KGR 62, MYK-12, MYK-16, MYK-17, others (all modes)
 Number of KGs Controlled .8 (multiplexed one at a time)
 Clock250 Hz to 2 MHz programmable, TTL, crystal-controlled

Traffic Processing

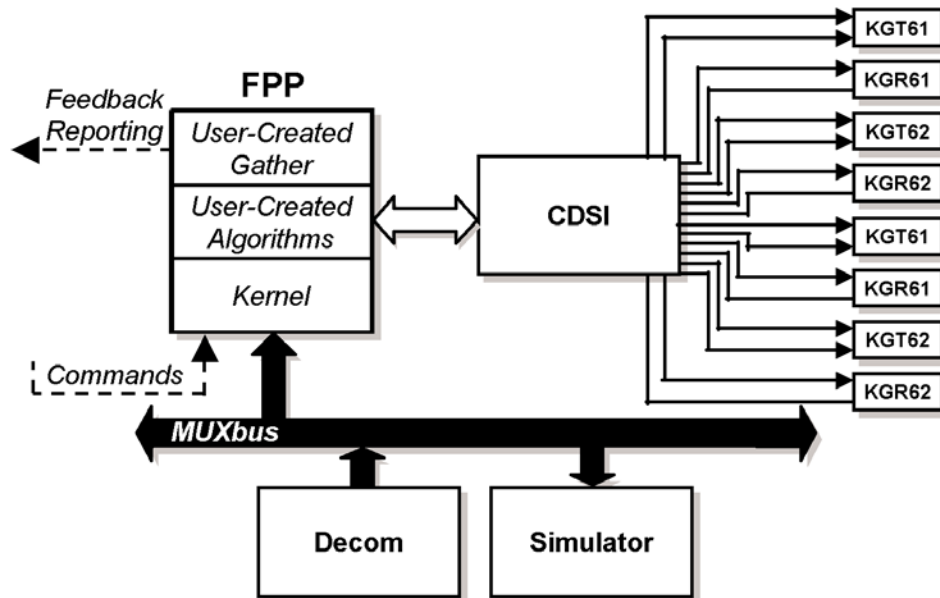
User-Created Interrupt Service RoutineInterrupts at user-programmable FIFO almost empty, almost full levels
 Number of Traffic Streams .8 (each is user-programmable as input or output)
 Programmable End of Message Detection4 to 124 continuous S tones on 4-bit boundaries
 FIFO Depth16K tones (ternary); 4 kB (binary)

Software

Commanding DemonstrationSends command file from workstation to FPP; transmits it out KGT port as 1, 0, S data; receives it via test cable through KGR port; reconverts it to binary; then gathers it to workstation file for bitwise verification

General Requirements

System Chassis2 9U slots (includes slot for routing of I/O cables)
 Maximum per Chassis7 module sets
 Maximum per System32
 Connector Type62-pin D shell
 Rear Panel8 slots plus 2 for FPP4
 Power5V @ 4.5A (FPP4)
 EnvironmentSee Base System Chassis data sheet
 Dimensions365mm (9U) x 160mm (Eurocard std.)
 Status Display12 LEDs and 8 character display



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