



MOTOROLA



MC6859

Advance Information

DATA SECURITY DEVICE

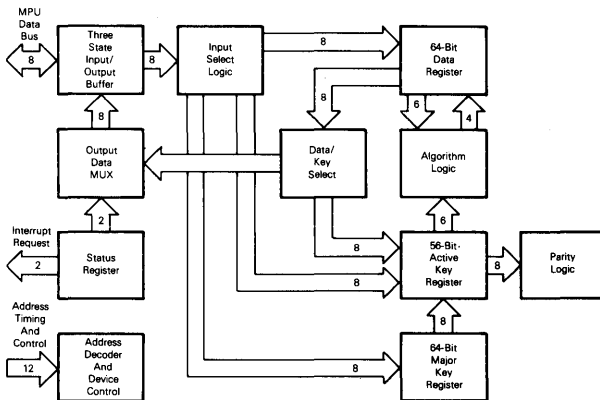
The MC6859 Data Security Device (DSD) is a monolithic MOS integrated circuit designed to be integrated into a wide range of equipment requiring protection of data by the employment of cryptographic measures.

The cryptographic algorithm utilized by the device is the Data Encryption Standard (DES) as adopted by the U.S. Department of Commerce, National Bureau of Standards (NBS), in publication FIPS PUB 46 (1-15-1977).

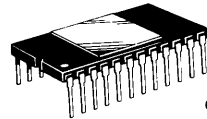
Through the use of flexible on-chip control and status circuitry and external control lines, the DSD provides direct capability of adapting the functional implementation of the DES algorithm for various specific system requirements for data protection.

- Direct Compatibility with the M6800 Microprocessor Family
- Data Encryption Standard Algorithm
- Two Separate Interrupt Output Lines for Program Controlled Interrupt Capability
- Up to 400 KBPS Throughput Rate of 64-Bit Block Cipher (Exclusive of Software Overhead)
- TTL Compatible
- Single +5 V Power Supply

DATA SECURITY DEVICE BLOCK DIAGRAM

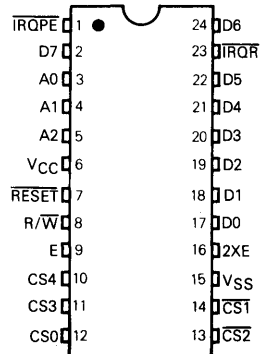


MOS
 DEPLETION LOAD
 (N-CHANNEL, SILICON-GATE)
DATA SECURITY DEVICE



L SUFFIX
 CERAMIC PACKAGE
 CASE 716

PIN ASSIGNMENT



NOTICE

This product may not be exported without prior approval from the U.S. Department of State, Office of Munitions Control.

This document contains information on a new product. Specifications and information herein are subject to change without notice.