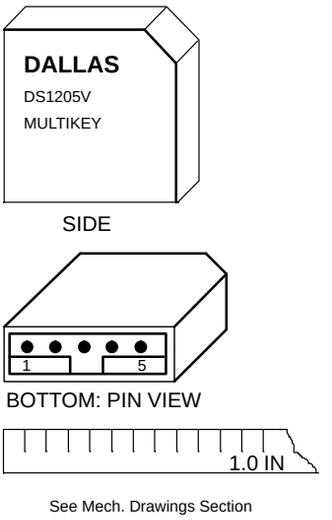
DALLAS SEMICONDUCTOR

DS1205V
MultiKey

FEATURES

- Three secure read/write data partitions of 384 bits each
- 64-bit security match and I.D. fields provide positive identification and security for each secure data partition
- One non-secure read/write partition of 512 bits
- Electrical tampering is met with seemingly valid, yet false, responses
- Secure data cannot be deciphered by reverse engineering
- Access via Dallas 3-Wire Interface
- Applications include software authorization, configuration management, and systems access control

PIN ASSIGNMENT



See Mech. Drawings Section

DESCRIPTION

The DS1205V MultiKey has three, 384-bit read/write data partitions, each protected by its own 64-bit I.D. and security match fields. The security match field, programmed by the customer, can never be read from the DS1205V. An additional security feature, the Intelligent Response generator, uses invalid security match codes as the “seed” to trigger seemingly valid, yet false responses to electronic attack.

Communication with the DS1205V is via the Dallas 3-Wire Interface (Data, Clock, $\overline{\text{Reset}}$). These signals are under host software control.

The DS1205V MultiKey is designed to be plugged into a standard 5-pin, 0.1 inch-center SIP receptacle. A guide is provided to insure proper alignment with the receptacle.

System designers can use the DS1205V to insure that their valuable firmware can only by run when a valid key is present. The MultiKey can also contain data on system configurations and upgrade options. Designers may choose to allow maintenance or diagnostic routines to be run only by an authorized key holder.

See the DS1205S MultiKey Chip data sheet for implementation details.