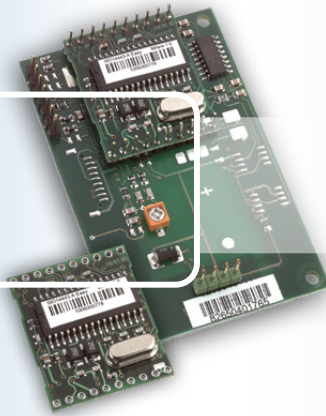**HID**®

MIFARE™ Easy Embedded Reader Platform

READER BOARD FAMILY PROVIDES EMBEDDED CONTACTLESS READ/WRITE SOLUTIONS

- **Fast Contactless Transmission** – Optimized data throughput time between data carrier and host
- **Flexibility** – Integrated and optimized antenna for a quick and easy integration into applications
- **Cost-effective** – Minimized integration and engineering costs save time and money
- **Simplicity** – Major tag IC features already implemented for easiest system integration
- **Connectivity** – Integration with OS independent interfacing concept

KEY FEATURES

- Easy to integrate with full feature support of most transponder ICs
- Optimized to read/write to MIFARE and ISO 14443A standard cards
- Supports the complete portfolio of ISO14443A tag ICs
- Minimized integration costs
- Future proof due to firmware upgrade capability
- Device can be easily connected to a controller or any host system via serial interface
- Two alternative protocols for all components
- Full access to data of contactless memory cards

The MIFARE™ Easy Embedded Reader platform offers system integrators and terminal manufacturers a cost-efficient design-in solution for contactless applications utilizing MIFARE technology. Secure, scalable MIFARE Easy reader modules with read/write capability are designed to be easily integrated into compact terminals or handheld devices.

The modules and platform are ideal for automatic fare collection (AFC), ticket vending machines, validators, card printers, mobile devices and various other payment applications.

SPECIFICATIONS

	Reader Core	Reader Board RS232 Compact
Product Code	0701800133-1	0701800029
RF Transmit Frequency	13.56 MHz	
Supported Standards	ISO 14443 A	
Supported Tag-ICs	MIFARE™ Standard, MIFARE™ 4k, MIFARE™ Pro X, MIFARE™ Ultralight, MIFARE™ DESFire™ (serial no. only), SLE66R35, SLE44R35, ISO 14443A Tags	
Host Communication	Point-to-Point	
Communications Interface	C-MOS TTL	RS232
Communications Protocol	Specific ASCII and Binary Protocol	
Communications Parameter	9600 Bit/s to 57600 Bit/s, 8, N, 1	
Firmware Boot-Loader	No	
S/W Driver	Virtual COM port, API - DLL	
Power Supply	5 VDC ± 10% regulated	
Power Consumption	150 mA < 10mA at power down mode	
Reading Distance	Up to 3.74" / 95 mm, depending on tag and antenna	Up to 3.35" / 85 mm depending on tag and antenna
RF Transmission Speed	106 kBit/s	
Antenna	External	Integrated
Input/Output Connector	2 status indicator LED lines, 1 I/O Port	
Size	(H) 1.0 / 1.00" x 1.18" x 0.19" ± (L/W) 0.02" (H) 0.04" 25.5 x 30.0 x 4.8 mm ± (L/W) 0.5	2.76" L x 1.77" W x 0.48 H" ± 0.04" in. 70.0 L x 45.0 W x 12.1 mm H ± 1.0 mm
Weight	0.01 lb ± 10% / 5 g± 10%	0.04 lb ± 10% / 16g ± 10%
Operating Temperature	-4° F to +176° F / -20° C to + 80° C	
Storage Temperature	-40° F to +185° F / -40° C to + 85° C	
Approvals / Compliances	EN 300-330, CE, FCC, RoHS compliant, UL compliant EN 300-330, CE, FCC Part 15, RoHS compliant	
MTBF	3,000,000 h	200,000 h

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