Biometric *Tri* Scan Reader with capacitive finger sensor for the Motorola MC70/75/75A

+ Features and benefits:

+ High resolution (508dpi) capacitive fingerprint sensor

+ ISO7816 compliant contact smartcard reader

+ Contactless smartcard reader supporting ISO14443 (including MIFARE, CAC, TWIC, FRAC cards as well as ICAO ePassports) and ISO15693 and HID *iClass*

+ Standards based solution simplifies application development.

+ Rugged, snap on peripheral for MC70/75/75A

+ Powered by MC70/75/75A

PART NO.

1084-02-SO-TSR

+ The Biometric *Tri Scan* reader combines **CONTACT SMART CARD**, **CONTACTLESS SMART CARD** and **FINGERPRINT BIOMETRIC CAPTURE**. The biometric core uses a rugged, high image quality fingerprint area sensor. The *Tri scan* reader is compatible with most contact AND contactless Smart Cards including all *Mifare* and *iClass* contactless cards. The contactless card reader is hardware compatible with the CAC, TWIC, FRAC cards as well as ICAO ePassports.

+ The *Tri Scan* *reader* attaches as a snap-on unit to the base of the terminal - the mechanical design of the module enables the attachment to remain compatible with existing MC70/75/75A accessories such as the desktop charge cradle and the car charger. The module may be quickly removed from the MC70/75/75A, or semi permanently attached with two screws.

+ The fingerprint reader sensor has a rugged coating to provide Electro Static Discharge immunity to 15kV and the ability to withstand everyday wear and tear (rated to >2 million touches). The sensor has a high resolution (508 dpi) and high pixel resolution (256 level grey scale) and is capable of producing very high contrast ratio images operating in the Enhanced Image Mode. The reader conforms to the FIPS 201 specification for Single Finger Capture Devices.

+ The contact smartcard reader is compliant to ISO7816-1,2,3,4, and supports T=0 and T=1 protocols and 2-wire and 3-wire modes. The reader is based on industry standards, including PC/SC and EMV 2000 Level 1 to address a wide range of applications across government, enterprise and financial sectors.

+ The contactless smartcard reader provides the ability to read and write to a wide variety of transponders at 13.56 MHz compliant to ISO14443A, ISO14443B, ISO 15693 and HID *iClass*.

+ The Tri Scan reader is supported by demonstration software and a Software Development Kit (SDK). The SDK is required for application development and provides the means to capture finger images. It can be used with many third party Matchers (for example Innovatrics proprietary and ANSI compliant) to extract and match fingerprint templates. Templates may be stored on a remote database or on a contact or contactless smartcard and used for 1:1 and 1:N verification.

+ Communication is via the MC70/75/75A USB port which is automatically switched to allow ActiveSync of the MC70/75/75A with a host device.

design - development - manufacture

Fingerprint Sensor	
Acquisition rate	15 frames/second
Sensor resolution	508dpi
Pixel array	256 x 360 pixels
Sensor area	12.8 x 18.0 mm
ESD protection	IEC 61000-4-2 Level 4 ±15kV
Raw image size	Approximately 100kbyte
Template size	Algorithm dependent – typically 300-400 bytes
Contact Smartcard Reader	
Compliance	ISO7816-1,2,3,4 PC/SC, EMV2000 Level 1 capable. T=0, T=1 Protocol. I2C
Connector	Meets ISO 7816-2, rated for >100 000 insertions.
Card size	Full (ID-1)
Card support	Up to 420Kbps card interface, clock frequency up to 8MHz, 5V, 3V, 1.8V smart cards.
Contactless Smartcard Reader	
RF Transmit Frequency	13.56MHz
Supported RFID Standards	ISO14443A, ISO14443B, ISO 15693
Supported contactless cards	✓ ISO15693 ✓ ISO14443A/B ✓ Philips: MIFARE®, DESFire®, MIFARE ProX®, SMART MX, and iCode® ✓ HID: iCLASS®
Reading distance	Intended for in-slot card reading, capable of reading up to 2.5cm (1") from back surface dependent on transponder type.
Connection Interfaces	
Charging of host terminal	Host terminal charged through the reader
Reader power supply	Powered from host terminal
ActiveSync	via USB, automatically switched when connected to a PC

design - development - manufacture

Physical Characteristics

Dimensions	90 (h)×82(w)×36(d)mm (3.54"x3.23"x1.42") maximum
Weight	100g (3.6 oz)
Enclosure material	Lexan Polycarbonate
Colour	Grey
Material finish	Sparked surface
Mechanical attachment	Snap-on action with optional locking screws
Docking	Attachment maintains dockability with Motorola docking cradle for charging and ActiveSync

Environmental

Operating Temperature	-10°C to +50°C (14°F to 122°F)
Storage Temperature	-40°C to +60°C (-40°F to 140°F)
Humidity	Up to 90% Relative humidity Non Condensing
Drop specification	1.3m (4.26ft) to concrete, 6 drops per 6 sides over operating temperature; 1.5m (5ft) to concrete, 2 drops per 6 sides at ambient temperature 23ºC (73ºF)
Sealing	Internal components conformal coated
Electrostatic discharge	+/-15kV air discharge, +/-8kV direct discharge
Construction	RoHS compliant

Regulatory

EMI/RFI	TBC
Electrical Safety	TBC

+ About TSL

TSL designs and manufactures both standard and custom embedded, snap on and standalone peripherals for handheld computer terminals. Embedded technologies include:

- RFID - Low Frequency, High Frequency and UHF
- Bluetooth
- GPRS/GSM
- IrDA
- Contact Smartcard
- Fingerprint Biometrics
- 1D and 2D Barcode Scanning
- GPS
- 802.11 Wi-Fi
- Magnetic Card Readers
- OCR-B and ePassport

Utilizing class leading Industrial design, TSL develops products from concept through to high volume manufacture for Blue Chip companies around the world. Using the above technologies TSL develops innovative products in a timely and cost effective manner for a broad range of handheld devices.

Telephone:	+44 (0)1509 238248
Fax:	+44 (0)1509 220020

Postal Address:

Technology Solutions (UK) Limited,
Suite C, Loughborough Technology Centre,
Epinal Way,
Loughborough,
Leicestershire,
LE11 3GE.
United Kingdom.

Email: enquiries@tsl.uk.com

ALSO AVAILABLE:

1084-03-SO-TSR   **Optical Triscan reader**

1084-04-SO-TSR   **Contact and Contactless**

Smart Card reader

Rev 1.2 – 05th July 2011

design - development - manufacture

Legacy Technology Services

We Rent & Sell All Types Of Barcode Equipment

Call now to talk to an expert
866-271-9891

www.LegacyGlobal.com

Some brands we carry

About us
- Legacy Technology Services is a leading nationwide provider of mobile computing, barcode, printers and point of sale equipment and services.

- For over a decade, thousands of clients across North America have trusted us to provide equipment from leading manufacturers backed by the services to support them.

Latest Hardware from top manufacturers
- Legacy handles virtually every major manufacturer of mobile computing, barcoding and point of sale equipment.

Expert Repair and Maintenance services
- Legacy is one of the best repair facilities in North America

Discontinued product sourcing
- They don't make it anymore? Our inventory also includes manufacturer close-outs and discontinued equipment to support our clients legacy infrastructure.

Trade-in and Disposal services
- That old equipment laying around your facility may still have some value. Legacy routinely purchases equipment from our clients around the globe.
  - Data destruction
  - Hardware disposal
  - Auditing services

Dedicated client account team
- Dedicated, highly trained account managers are here to answer all your questions and provide top notch service.

Equipment rental services
- Sometimes renting is a better solution, Legacy's huge rental inventory provides the equipment you need for temporary needs and projects.

Legacy, Inc.,
160 West Road,
Ellington, CT 06029

Toll Free: 866-271-9891
Fax: 888-522-4684