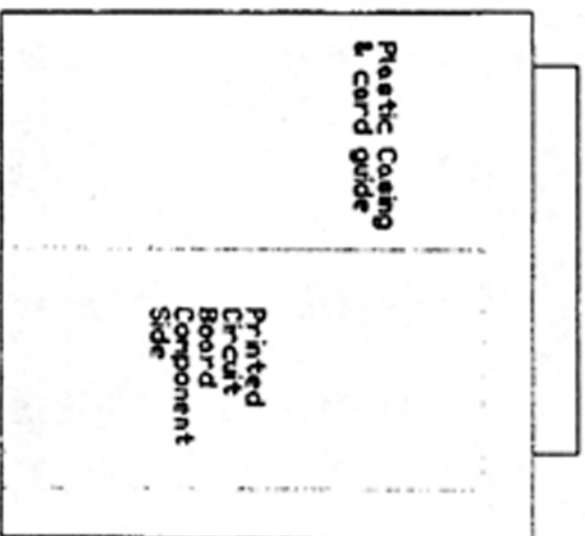


Additional Information can be found on the Web & Nuts & Volts magazine, Nov., 1998.

ALL INFORMATION IS SUPPLIED AS IS, WITHOUT BELIEVED ACCURATE, NO LIABILITY IS ASSUMED BY TANNER'S ELECTRONICS, NOR THE AUTHOR FOR ANY ERRORS IN THIS DATA SHEET.



Track 2 Format

Start Marker 1 Character 8 or 1

End Marker F or 7
Separator char 0 or =

Primary Account Number up to 19 characters

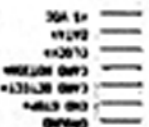
Separator 1 character

Country Code if acct no. starts with 59
USA is 810

Expiration Date or separator 4 chars YYYY or 1 char.
Other Data...

End Marker

LRC (checksum)



Notes:

Reader is an ISO2 Reader, which reads track 2 card data.

All signal pins logic levels are active low!

Signals:

1. +5VDC (regulated)
2. Data* (True when clock is low.)
3. Clock* Low when data is valid
4. Card Motion*
5. Card Detected* True when card is pushed in to threshold.
6. End Stop* True when card is fully inserted.
7. Ground. Zero Voltage reference.

Data is presented LSB to MSB. ISO track 2 is 4 data bits plus 1 parity.

Card: Imagine Softworks

Model: Panasonic Magcard Reader

Device: ZU-M2121S Revision: A

Author: TK Size: A

Date: 12/09/1998 Sheet of