

# 3M™ CF Card Header

CompactFlash™ Type II, Long Guides, Surface Mount

7E50 Series



- Headers mate with both CompactFlash™ Type I and Type II cards
- Polarization options for top or bottom boardmount
- Extended guide rails enable accurate and easy card insertion
- Single row surface mount solder tails facilitate auto placement and IR soldering
- Optional 2 mm board standoff enables board population
- Meets CFA standards for known compatibility and reliability
- Metal brace provides stability for ejector attachment
- Multiple styles of ejector available
- Optional ejector can be purchased pre-assembled or separately
- Optional Tape and Reel or Tray packaging for automated assembly
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3Mconnector.com](http://www.3Mconnector.com) for compliance information (RIA E1 & C1 apply)

Date Modified: August 16, 2010

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## Physical

### Insulation:

Material: High Temperature Thermoplastic

Flammability: UL 94V-0

Color: Beige

### Contact:

Material: Copper Alloy

### Plating:

Underplating: 2.03  $\mu\text{m}$  [ 80  $\mu''$  ] Nickel

Wiping Area: 0.38  $\mu\text{m}$  [ 15  $\mu''$  ] or 0.76  $\mu\text{m}$  [ 30  $\mu''$  ] Gold

Solder Tails: 3.81  $\mu\text{m}$  [ 150  $\mu''$  ] Matte Tin or Gold Flash

Marking: 3M Logo

## Electrical

Current Rating: 0.5 A

Insulation Resistance:  $10^3 \Omega$  at 500  $V_{DC}$

Withstanding Voltage: 500  $V_{AC}$  for 1 minute

## Environmental

Temperature Rating: -40°C to +85°C

Process Rating: Maximum 260 C (per J-STD-020C)

Moisture Sensitivity Level: 1 (per J-STD-020C)

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| Pin Function | L, Pin length Dim | Pin Position   |
|--------------|-------------------|----------------|
| Detect       | 3.50 mm [ .138" ] | 25, 26         |
| General Use  | 4.25 mm [ .167" ] | All other pins |
| Power        | 5.00 mm [ .197" ] | 1, 13, 38, 50  |



Note: See TS-2154 for applicable ejectors and drawings of assembled ejectors and headers.

## Ordering Information

**N7E50 - X516XX - XX - XXX** (RIA E1 & C1 apply)

M = CF I & II, 31.60 mm, Normal Type, Metal Guide  
 N = CF I & II, 31.60 mm, Inverse Type, Metal Guide

Plating Options:

RA = 0.38 μm [15 μ"] Gold with matte tin tail  
 RB = 0.76 μm [30 μ"] Gold with matte tin tail  
 EA = 0.38 μm [15 μ"] Gold with Au Flash tail  
 EB = 0.76 μm [30 μ"] Gold with Au Flash tail

Board Standoff:  
 40 = None  
 50 = 2.00 mm [ .079" ]

Pre-assembled Ejector Option:  
 Blank = No Ejector  
 A = Right Dual Push Ejector (7E50-B516-05)  
 C = Left Dual Push Ejector (7E50-B616-05)

\*Packaging Options:  
 Blank = Standard White Polystyrene Trays  
 WF = Tape and Reel (Automated Assembly)  
 Note: WF option includes molded suction cap for automated pick and place

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| Part Number     | E<br>mm<br>[ inch ] | F<br>mm<br>[ inch ] | G<br>mm<br>[ inch ] | H<br>mm<br>[ inch ] | K<br>mm<br>[ inch ] | Pin W  | Pin X  | Pin Y  | Pin Z  |
|-----------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------|--------|--------|--------|
| N7E50-M516XX-40 | 0.00<br>[ .000 ]    | 6.30<br>[ .248 ]    | 1.40<br>[ 0.55 ]    | 0.80<br>[ .031 ]    | 2.35<br>[ .093 ]    | Pin 1  | Pin 25 | Pin 26 | Pin 50 |
| N7E50-M516XX-50 | 2.00<br>[ .079 ]    | 8.30<br>[ .328 ]    | 1.40<br>[ .055 ]    | 0.80<br>[ .031 ]    | 4.35<br>[ .171 ]    | Pin 1  | Pin 25 | Pin 26 | Pin 50 |
| N7E50-N516XX-40 | 0.00<br>[ .000 ]    | 6.30<br>[ .248 ]    | 0.80<br>[ .031 ]    | 1.40<br>[ .055 ]    | 3.95<br>[ .156 ]    | Pin 50 | Pin 26 | Pin 25 | Pin 1  |
| N7E50-N516XX-50 | 2.00<br>[ .079 ]    | 8.30<br>[ .328 ]    | 0.80<br>[ .031 ]    | 1.40<br>[ .055 ]    | 5.95<br>[ .234 ]    | Pin 50 | Pin 26 | Pin 25 | Pin 1  |
| N7E50-H516XX-50 | 2.00<br>[ .079 ]    | 7.90<br>[ .311 ]    | 1.40<br>[ .055 ]    | 0.80<br>[ .031 ]    | 4.15<br>[ .163 ]    | Pin 1  | Pin 25 | Pin 26 | Pin 50 |



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## Standard White Polystyrene Trays (No Eject Attached)



Standard tray notes :

1. Material: PS
2. Packaging quantity:
  - 1 Tray: 18 pcs
  - 1 Carton box: 15 trays per carton (270 pcs total)
3. Carton size: 340 mm (L) by 230 mm (W) by 255 mm (H)
4. Standard tray packaging is not suitable for suction-type pick-and-place Operations. Pick-and-place capable tray packaging is available on request. Contact 3M technical service.
5. For product with pre-assembled ejectors contact 3M technical service for dimensioned drawings.

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## Tape and Reel for Automated Pick and Place (No Eject Attached)



Notes :

1. Material: PS
2. Packaging quantity
  - 1 Reel: 100 pcs
  - 1 Carton: 4 reels per carton (400 pcs total)
3. Carton size: 725 mm (L) by 375 mm (W) by 320 mm (H)
4. For tape and reel packaging with removable vacuum cap for suction pick and place operations
5. For product with attached ejectors contact 3M technical service for dimensioned drawings.

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