

# MECL Logic Surface Mount

## WHY SURFACE MOUNT?

Surface Mount Technology is now being utilized to offer answers to many problems that have been created in the use of insertion technology.

Limitations have been reached with insertion packages and PC board technology. Surface Mount Technology offers the opportunity to continue to advance the State-of-the-Art designs that cannot be accomplished with Insertion Technology.

Surface Mount Packages allow more optimum device performance with the smaller Surface Mount configuration. Internal lead lengths, parasitic capacitance and inductance that placed limitations on chip performance have been reduced.

The lower profile of Surface Mount Packages allows more boards to be utilized in a given amount of space. They are stacked closer together and utilize less total volume than insertion populated PC boards.

Printed circuit costs are lowered with the reduction of the number of board layers required. The elimination or reduction of the number of plated through holes in the board, contribute significantly to lower PC board prices.

Surface Mount assembly does not require the preparation of components that are common on insertion technology lines. Surface Mount components are sent directly to the assembly line, eliminating an intermediate step.

Automatic placement equipment is available that can place Surface Mount components at the rate of a few thousand per hour to hundreds of thousands of components per hour.

Surface Mount Technology is cost effective, allowing the manufacturer the opportunity to produce smaller units and offer increased functions with the same size product.

## MECL AVAILABILITY IN SURFACE MOUNT

Motorola is now offering MECL 10K and MECL 10H in the PLCC (Plastic Leaded Chip Carrier) packages.

MECL in PLCC may be ordered in conventional plastic rails or on Tape and Reel. Refer to the Tape and Reel section for ordering details.

## TAPE AND REEL

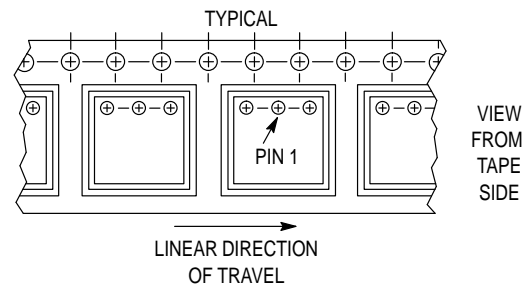
Motorola has now added the convenience of Tape and Reel packaging for our growing family of standard Integrated Circuit products. The packaging fully conforms to the latest EIA

RS-481A specification. The antistatic embossed tape provides a secure cavity sealed with a peel-back cover tape.

## GENERAL INFORMATION

- Reel Size 13 inch (330 mm) Suffix: R2
- Tape Width 16 mm
- Units/Reel 1000

## MECHANICAL POLARIZATION



## ORDERING INFORMATION

- Minimum Lot Size/Device Type = 3000 Pieces.
- No Partial Reel Counts Available.
- To order devices which are to be delivered in Tape and Reel, add the appropriate suffix to the device number being ordered.

### EXAMPLE:

#### ORDERING CODE

MC10101FN  
MC10101FNR2  
MC10H101FN  
MC10H101FNR2  
MC12015D  
MC12015DR2

#### SHIPMENT METHOD

Magazines (Rails)  
13 inch Tape and Reel  
Magazines (Rails)  
13 inch Tape and Reel  
Magazines (Rails)  
13 inch Tape and Reel

## DUAL-IN-LINE PACKAGE TO PLCC PIN CONVERSION DATA

The following tables give the equivalent I/O pinouts of Dual-In-Line (DIL) packages and Plastic Leaded Chip Carrier (PLCC) packages.