f Fermilab

Fermi National Accelerator Laboratory
P.O. Box 500•Batavia,Illinois•60510-500
(630) 840 - 5042 jaws@fnal.gov

Particle Physics Division-CMS, MS 205
FAX # 630/840-2194

March 12, 2002

QIE8TB Chip Packaging Instructions

The QIE8TB wafer is 4.0 inches (101.6 mm) in diameter.

Backlap the wafer to the appropriate thickness for a 1.4 mm thick, 10mm x 10mm TQFP package.

Dice the wafer. Saw through the process control monitors. There are approximately 410 QIE8TB die per wafer.

Package the parts in 64-pin TQFP packages. See the attached wire bonding diagram. Note that the dice are **not** inked. Use blind assembly to package all of the dice.

Label the parts as QIE8TB as shown on the attached diagram. Place the assembly or labeling date on the packages as shown on the attached diagram.

Wafer skeletons do not need to be returned.

Reject instructions; scrap.

*** Please return the wafer carrier to Fermilab. ***

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Fermilab P. O. # 543377

Wafer Lot # 16463.2 (2 Wafers)

Turn Around Time: Standard

Fermilab Contact Person:

Julie Whitmore
(630) 840-5042

Bill To Address:

Fermilab
Accounts Payable
P.O. Box 500
Batavia, IL 60510
USA

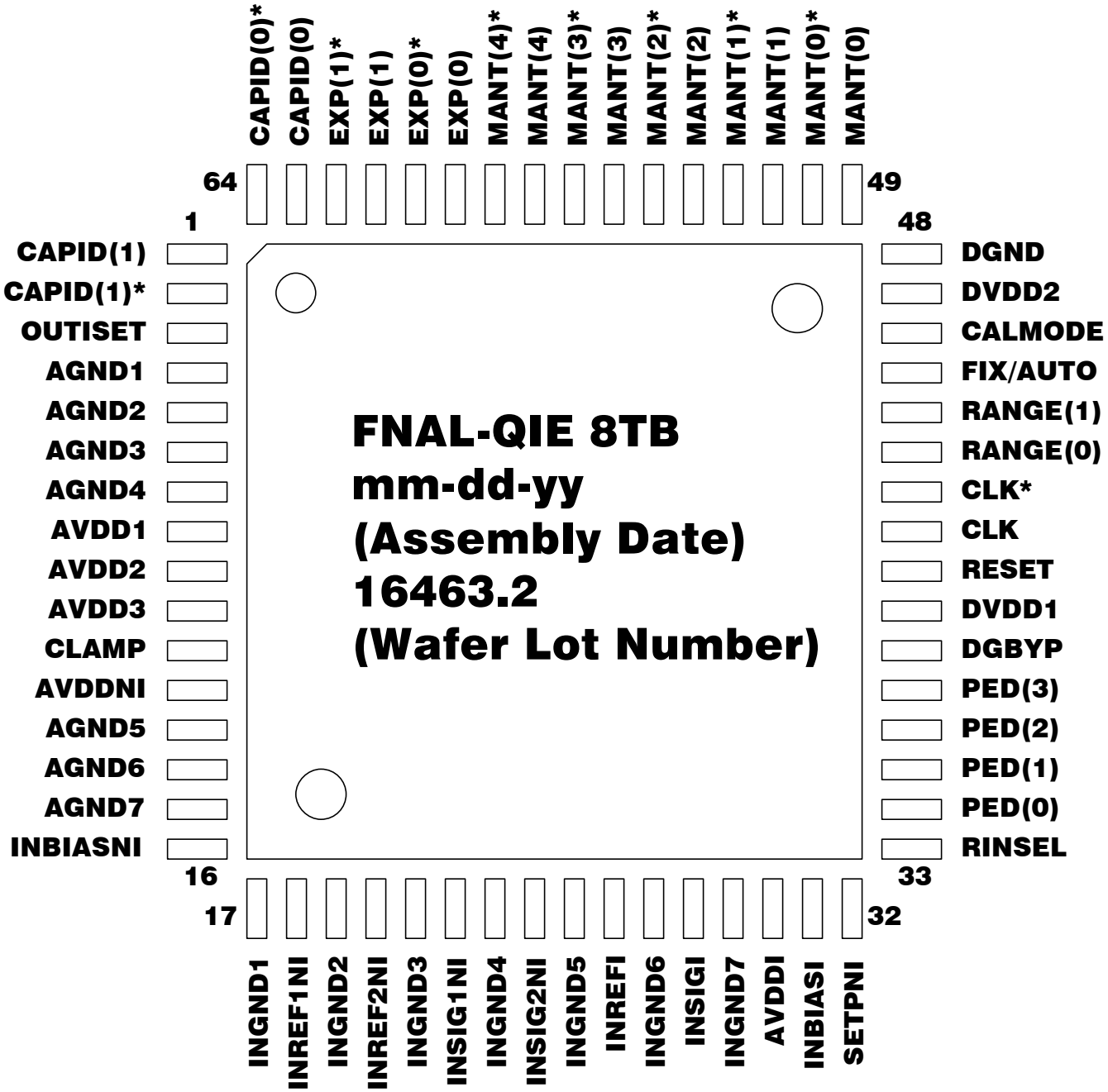
Ship To Address:

Fermilab
Receiving/Warehouse 2
Kirk Rd. & Wilson St.
c/o Julie Whitmore
Batavia, IL 60510
USA

02/21/02

QIE 8TB (Pre-Production V2)

64-Lead TQFP Package Pin Assignments

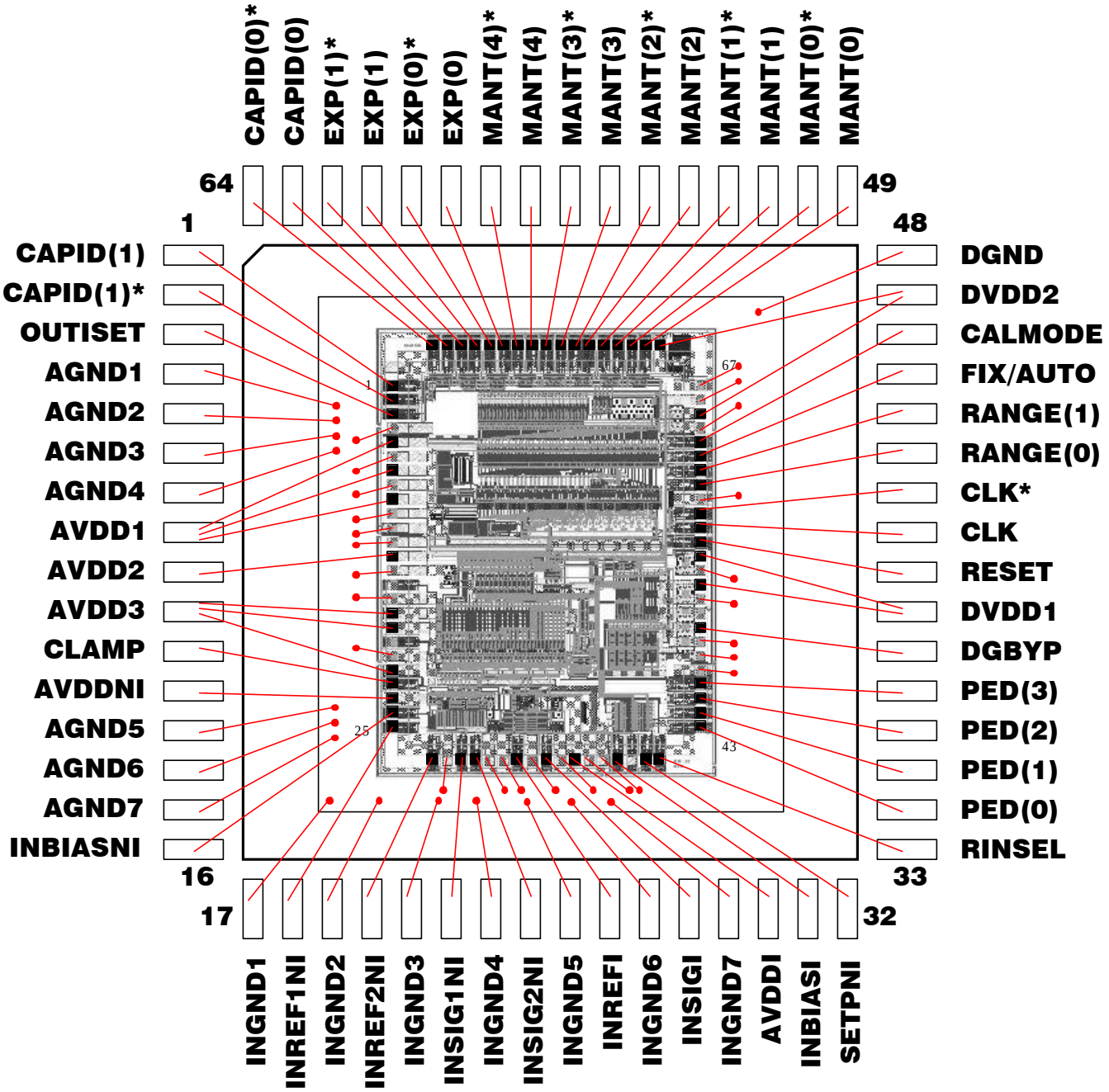


02/21/02

QIE 8TB (Pre-Production V2)

64-Lead TQFP Package Bonding Diagram

(Drawing NOT to Scale)



QIE 8 Die Size: 3.345mm x 4.4mm
Die bond pad opening: 85 micron x 85 micron
Die bond pad pitch: 140 micron
Die bond pad metalization: Al (1%Si, 1%Cu)
Die Attach: Thermally Conductive

Notes: Package Pins 4, 5, 6, 7, 13, 14, 15, 17, 19, 21, 23, 25, 27, 29, and 48 are bonded to the die attach pad.
Package Pins with Multiple Bonds:
Pin 8, Bonded to Die Pads 5, 7, 9.
Pin 10, Bonded to Die Pads 17, 18, 21.
Pin 39, Bonded to Die Pads 53, 55.
Pin 47, Bonded to Die Pads 65, 68.