



BGA/Flip Chip/ COB Assembly Build Sheet

Original request

Changed request

Rev # _____

QP Internal S.O. #: _____

QP Sales Contact: _____

QP Quote #: _____

CUSTOMER CONTACT INFORMATION

Company: _____

Contact Name: _____ Date _____

Phone: _____

Email: _____

P.O. #: _____

Is this item under the jurisdiction of the International Traffic in Arms Regulations (ITAR)? Yes No

DELIVERY REQUEST

LEAD TIMES WILL VARY BASED ON SCOPE OF WORK AND QUANTITY. STANDARD LEAD TIME FOR BENCHMARK ORDER (PKG: BGA, PKG QTY: <50, F/C OR WIRE COUNT: <100, SINGLE DIE ATTACH) IS 5 DAYS. EXPEDITE (3-4 DAYS). PREMIUM (<2 DAYS). SEE QUOTE FOR DELIVERY CYCLE SPECIFIC TO YOUR BUILD.

Standard

Expedite

Premium

DIE INFORMATION:

ALL WAFER PROCESSING REQUIRES A BACKGRIND/DICING BUILD SHEET TO BE COMPLETED AND ATTACHED SEPERATELY.

Die Format: Waffle Pack Gel-Pak Diced Wafer on Tape Wafer (requires processing) Other: _____

Die Size: _____ X _____ μ m or mils (a) Wafer ID/Die ID: (b) Lot # (c) Qty of Devices to be Assembled from IDPad Pitch: _____ X _____ μ m or mils 1a. _____ 1b. _____ 1c. _____Bond Pad Dims: _____ X _____ μ m or mils 2a. _____ 2b. _____ 2c. _____Bond Pad Opening: _____ X _____ μ m or mils 3a. _____ 3b. _____ 3c. _____Thickness: _____ μ m or mils 4a. _____ 4b. _____ 4c. _____

Metalization: Aluminum Gold Other (Specify): _____ Probed? Passivated? Cu Pillar w/ SAC Top?

Bump Metallurgy: Leaded Lead-Free Gold Other: _____ Bump Diameter: _____ Bump Height: _____

DEVICE INFORMATION

Assembly Type: Flip Chip Wire bond

Device Name: _____ Bump/Lead Pitch: _____ Die Per Package: _____ Bumps/Wire Count Per Package: _____

Qty of Devices to be Assembled: _____ Package Dimension (mm): _____ X _____ Package Description: _____

Packages provided by: Customer Quik-Pak Packages Require Opening (OcPP)

Package Type*: BGA COB Other: _____ BGA Package Outline Drawing Number: _____

*FOR BGA PACKAGES, A PACKAGE OUTLINE DRAWING MUST BE INCLUDED.

SPECIAL INSTRUCTIONS (ATTACH ADDITIONAL DOCUMENTS IF NEEDED)

CUSTOMER FURNISHED MATERIALS:

PLEASE LIST ANY ADDITIONAL CFMs THAT WILL BE SHIPPED TO QUIK-PAK. IF MORE SPACE IS NEEDED, PLEASE ATTACH ADDITIONAL DOCUMENTS.

- | | | |
|----------|----------|----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |

WIRE BOND ASSEMBLY FLOW

ALL WIRE BONDING REQUIRES A BONDING DIAGRAM BE ATTACHED WITH CLEARLY LABELED PIN 1, DIE ORIENTATION, AND WIRES BONDS.

Please Indicate The File Format: CAD Drawing Other (JPEG, PowerPoint, PDF, etc.)

Select Die From: Center of Wafer(s) Wafer Map(s)

Die Attach Material (ENTER QTY IF SEPARATE LOTS REQUIRE DIFFERENT MATERIALS):

☐ Conductive Epoxy ☐ Thermally Conductive/Electrically Non-Conductive
☐ Non-Conductive Epoxy ☐ Material High Thermally/Electrically Conductive Material

Gold Wire Diameter (ENTER QTY IF SEPARATE LOTS REQUIRE DIFFERENT WIRE DIAMETER):

*STANDARD MATERIAL. OTHER OPTIONS MAY INCREASE COST/LEADTIME.

☐ 0.7 mil ☐ 0.8 mil ☐ 1.0 mil* ☐ 1.2 mil
☐ 1.3 mil ☐ 1.5 mil ☐ 2.0 mil ☐ Other (All available - call for wire size)

Heavy Wire: ☐ 5 mil ☐ 10 mil ☐ 15mil ☐ 20mil

Gold Ribbon: ☐ 1 X 2 mil ☐ 1 X 3 mil ☐ 1 X 4 mil

Seal (ENTER QTY IF SEPARATE LOTS REQUIRE DIFFERENT SEALING METHODS):

☐ None ☐ Encapsulation Around Wires Only ☐ Overmolded
☐ Standard Full Encapsulation (Glop Top) ☐ Frame & Lid (For Non-Solder Applications)
☐ Clear encapsulant (UV Cure) ☐ Other (Specify) _____

FLIP CHIP ASSEMBLY FLOW

ALL FLIP CHIP ORDERS REQUIRE DRAWING WHICH INCLUDES BUMPED DIE ORIENTATION TO PACKAGE.

Underfill Required? Temp Constraints If yes, max _____ °C

Flip Chip Method:

Thermocompression (T≥280°C; Recommended for ceramic or high temp organic substrate; Au bumps on I/O's required)

Thermosonic (T=150-180°C; Recommended for organic substrates; Au bumps on I/O's required)

Eutectic (Recommended for ceramic or organic substrates; Solder balls required)

MARKING

(MAX CHARACTER LENGTH AND NUMBER OF ROWS WILL VARY BASED ON PACKAGE SIZE. CONTACT QP FOR DESIGN APPROVAL AND COSTS.):

Mark pin 1 on device?

Custom Design

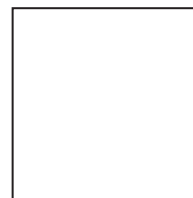
No Custom Marking

Hand Mark (Max. 1-3 characters): _____

Pad Print (White on Black) - E-mail artwork in native .EPS or .AI file format

Laser Mark (Black on Black) - E-mail artwork in native .EPS or .AI file format

Serialization (MAY INCREASE MARKING COSTS/LEADTIME). Please describe:



Mark pin 1 corner and indicate how marking should appear on package relative to pin 1.

SHIPPING (Contact QP with any special requests)

Reject Parts Disposition (UNLESS OTHERWISE NOTED ALL EXTRA MATERIALS WILL BE RETURNED): Return to Customer Bag and Tag Destroy

Shipping Method (Please Select)

Account #: _____

Pickup

FedEx

DHL

UPS

Courier

Special Instructions

Ship To Address (Finished Product):

Attn: _____

Address: _____

Ship To Address (Excess Die and Materials):

Attn: _____

Address: _____

Include Certificate of Conformance Containers Provided By:

Ship Materials In:

Quik-Pak

Trays

Customer

Tubes

Other: _____

For Quik-Pak Internal Use Only:

Orders meeting one of the following requirements require signatures by representatives in the following departments:

☐ Over \$20k ☐ ISO-13485 Processing ☐ Change in instructions after order has been released to production

Sales: _____ Date: _____

Engineering: _____ Date: _____

Manufacturing: _____ Date: _____

QA: _____ Date: _____

Per Quik-Pak quality program, risk assessment is required on orders over \$100k and/or Medical orders built under ISO-13485 std.