



*Global
Electronics
Manufacturing*

Quotation #: GTW16040701R01

Quotation

To: TAIWAN SEMICONDUCTOR CO., LTD. Miss Tin Chang	Date: 2016/04/07
	Prepared by: Jeanne Cheng

Description: *Assembly and Test Service*

This quote is being provided for TSC. It is being provided on limited information and is based on GEM'S standard flow assuming no special handling.
Quote is being provided for budgetary purposes only

1) Volume & End User's price

Package	Leadframe type (Etch/Stamp/S g/Dg)	D/A Material (Epoxy, SS)	Molding Compound	Wire type	Wire Size	Total Wires	Source Wires	Die Count	Test Time	Expected Volume	Baseline Price (USD per K units)	Wire Adder (USD per K units)	stitch Adder/ wire (USD per K units)	Remark
TO220FP NL	Stamping	SS	Green	Al	G:Al 5mil S:Al ≤15mil	2	1	1	<250ms	<1KK	56	2	1	
TO220AB	Stamping	SS	Green	Al	G:Al 5mil S:Al ≤15mil	2	1	1	<250ms	<1KK	60	2	1	20mil Al special adder \$0.5/K/wire

Services		# Samples	Price (US\$/K units)
Qualification samples for initial package or process qualification *		<1,000	\$250.00
Engineering samples for non-production released products		<8,000	\$250/lot, if unit price* QTY >\$250, will use unit price
Hot lot for sales samples for products already released to production		<1,000	2x standard price



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2) Pricing Notes:

- a) All reliability testing will be quoted separately based on customer's requirements.
- b) All prices reflect GEM standard BOM, Assembly Instructions and Test Instructions.
- c) BOM, where different than GEM's BOM, requires waiver acceptance by GEM and may require price adders if tooling adjustments or other factors materially alter GEM's cost.
- d) GEM will prepare and purchase raw materials in accordance to TSC's forecasted production rate. Should TSC's forecast drops significantly and there are excess dedicated raw materials in GEM's stock, GEM will notify TSC of this situation immediately. TSC has the right to use up the material at GEM by increasing production volume or have GEM ship the excess dedicated raw materials to TSC's designated location and TSC will bear shipment cost and material cost.
- e) In the event TSC requests GEM to change device specifications or relax test limits (due to low yield or any other reason) and retest a lot which has completed final test, GEM will levy a "re-test" charge by adding the re-test cost per unit to the contracted unit price in the invoice issued to TSC when the lot is shipped.

7) LME Copper surcharge for TO220FP

After closure of each quarter shipment from GEM to customer, calculate each month average daily pm price for copper at the London Gold market Fixing Ltd. And if particular quarter average price for copper reach USD 4800/ton and/or exceed USD 4800/Ton or less than USD 4800/ton by every USD 1.3/kg increment or decrement, the LGP Surcharge(LGPS)based on number of products Gem shipped per product type will be invoiced or credit to customer based on below formula.:(LME-US\$4800)/1000*(number of kunit shipped)*(US\$1.3)

LME Copper surcharge for TO220AB

After closure of each quarter shipment from GEM to customer, calculate each month average daily pm price for copper at the London Gold market Fixing Ltd. And if particular quarter average price for copper reach USD 4800/ton and/or exceed USD 4800/Ton or less than USD 4800/ton by every USD 1.67/kg increment or decrement, the LGP Surcharge(LGPS)based on number of products Gem shipped per product type will be invoiced or credit to customer based on below formula.:(LME-US\$4800)/1000*(number of kunit shipped)*(US\$1.67)

3) Trade term: **EX-FACTORY**

4) Customer shall deliver 100% probed wafers to GEM with following conditions:-

- a) Wafer delivery terms: DDP (Delivery Duty Paid), GEM's Shanghai (or Hefei or Kaohsiung) factory;
- b) Die unit price: No charge to GEM;



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- 5) Yield:
 - a) GEM's standard assembly yield = 98.5% (for reference);
 - b) Customer shall pay for at least 95% of total output (finished goods + failed goods) if the yield of that output is below 95% because of water or customer issues.
- 6) Payment term: Month end 30 days
- 7) Quotation validity period: 30 days. If TSC does not acknowledge acceptance of this quotation within quotation validity period, GEM has the right to change any item within the quotation and resubmit to TSC
- 8) Quotation duration: One year after acceptance of quotation or after first order, whichever comes first. After one year, GEM will issue new quotation and price list to TSC
- 9) *The services quoted in this quotation is based on GEM's warranty policy.*
- 10) Other conditions:
 - a) Process flow is per GEM standard. Any changes should have both parties agreement.
 - b) Customer must provide assembly, marking, testing and packing instructions.
 - c) Minimum Purchase Order amount is \$250.00
 - d) Customer are welcomed to provide their quality specifications (electrical, visual and mechanical) and reliability specifications (test conditions) as reference for GEM. GEM shall review these specifications and negotiate with customer in case GEM cannot meet some of the conditions specified by customer. If customer does not provide any of their quality and reliability specification to GEM, then GEM's internal quality and reliability specifications will be used as the guiding documents during processing of customer's products.

Approval:

Date:

Approval: :

Date:

CS L JH 4/8/2016

GEM Services, Inc.

TSC Representative, TSC



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Note: Please counter sign this quotation and return a signed copy to GEM sales representative as indication of your acceptance of all items in this quotation. If a signed copy of this quotation is not received by GEM sales representative within the quotation validity period, GEM reserve the right to make changes to any item within the quotation. Secondly, in the absence of a signed quotation from customer, if customer place an order (after the quotation validity period) with GEM on products described in this quotation using conditions set forth in this quotation and GEM accepts the order, both parties agree that this means both parties will accept all conditions set forth in this quotation in its entirety