

SpecTek MOBILE Buyers Guide

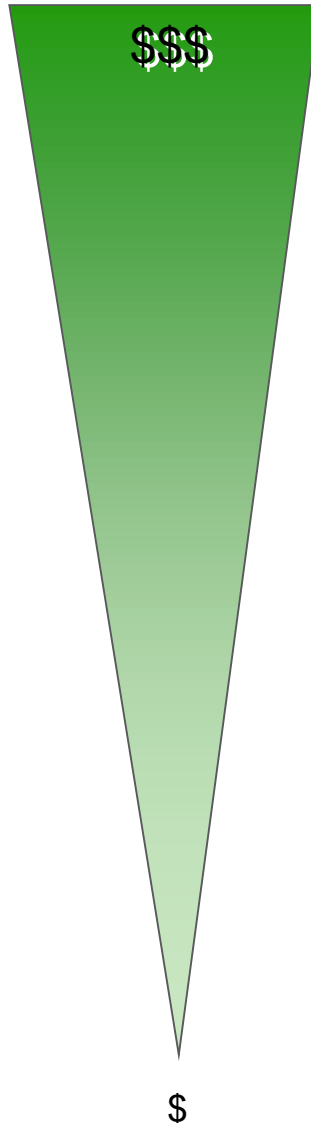
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SpecTek Product Management & Support

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SpecTek Product Grades Offered



- **FT grade**
 - Tested at 90°C through Micron flow. 100% Effective Yield. Datasheet support: Yes
 - Further Testing **NOT** Required
- **BT grade**
 - Tested at 70°C through SpecTek flow. 100% Effective Yield. Datasheet support: Yes
 - Further Testing **NOT** Required
- **TP grade**
 - Tablet grade, Probe Fallout. 95% Effective Yield. Datasheet support: NO
 - Customer Testing is Recommended.
- **PT grade**
 - Probe Fallout/Fully tested with higher IDD values. 90% Effective Yield. Datasheet support: NO
 - Customer Testing is Recommended.
- **S8 grade**
 - Partially Tested. 85% Effective Yield. Datasheet support: NO
 - Customer Testing is **Required**.
- **BU grade**
 - Untested. 50% Effective Yield. Datasheet support: NO
 - Customer Testing is **Required**.
- **BL grade**
 - Post Electrical Rejects. 25% Effective Yield. Datasheet support: NO
 - Customer Testing is **Required**.
- **SS grade**
 - Partially Tested. 25% Effective Yield. Datasheet support: NO
 - Customer Testing is **Required**.

Quick comparison by Grade

Product Grade	Description	*Effective Yield	Warranty	Testing Required	Data Sheet
FT	Micron Fully Tested at 90°C	100%	Yes	*No	Yes
BT	SpecTek Fully Tested at 70°C	100%	Yes	*No	Yes
TP	Tablet Grade, Probe Fallout	95%	*Limited	*Recommended	No
PT	Probe Fallout/Fully Tested with higher IDD	90%	Limited	Recommended	No
S8	Partially tested	85%	Limited	*Yes	No
B7	Untested	75%	Limited	Yes	No
BU	Untested	50%	Limited	Yes	No
SS	Partially tested	25%	Limited	Yes	No
BL	SpecTek Post Electrical Rejects	25%	Limited	Yes	No
S1	Untested Settle and Ship	100% of Nand Density			
S7	Untested Settle and Ship	70% of Nand Density			

* **Recommended:** Component testing is recommended prior to final form factor.

* **Yes:** Highly recommended that customer test product before assembling into application, otherwise they may run into difficulties returning a shipment if the product doesn't meet yield.

* **No:** Application/Chipset or other technical restrictions might apply. [Contact SpecTek Marketing/FAE](#) for confirmation

* **Effective Yield:** based off an all good device and/or 1/2 good device tested to qualified application.

* **Limited Warranty:** Product is only warrantied to the component yield listed as per component tested to qualified application. RMA allowed under these conditions: Fully tested product failures can be returned with no minimum quantity required. For Partially Tested/Untested product an RMA is allowed when purchased amount doesn't meet effective yield and if an RMA is granted then the total amount purchased must be returned. All RMA's must go through the Rapid RMA Response process, as well as the customer fails must be validated prior to an RMA number being granted.

All RMA's must be returned in either the original packaging or an ESD safe container(trays, tape and reel) or the RMA may be rejected.

Customer to SpecTek Grades Alignment

Customer's Application:	Recommended Product Grade
Smart Phone	-FT
Phablet/Tablet	-BT
Low-End Tablet, IOT, OTT after customer testing/sorting	-TP/PT
Low-End Mobile after customer testing/sorting	- S8, BL, SS

SpecTek Product Grades Offered (cont)

- **FT grade** (MPN Example: SM256M64Z91MD2BNK-062**FT**)
 - Targeted for smart phone applications.
 - Fully Tested with temperature and voltage guardbands.
 - With an approved chipset, customer should be able to assemble, qualify and ship product.

SpecTek Product Grades Offered (cont)

- **BT grade** (MPN Example: SU512M64Z01MD4BNK-075**BT**)
 - Targeted for phablet/tablet applications.
 - Fully Tested with temperature and voltage guardbands.
 - With an approved chipset, customer should be able to assemble, qualify and ship product.

SpecTek Product Grades Offered (cont)

■ Untested/Partially Tested Grades

- Limited warranted material on all untested or partially tested material. All parts must be fully tested by customer prior to assembly.
- Use the datasheet from the same Cell Technology and Process Node for reference purposes only
- Once fully tested and sorted and with an approved chipset, customer is expected be able to assemble, qualify and ship product.
 - -S8 := based on previous experiments, we expect the parts to yield better than 80%.
 - -BU := based on previous experiments, we expect the parts to yield better than 50%.
 - -SS := based on previous experiments, we expect the parts to yield better than 25%.
 - -BL := based on previous experiments, we expect the parts to yield better than 25%.
- Note- The average yield over the entire population All good, partial good, and no good parts (failures) Will be no less than the stated effective yield value.

Wafer/Die/Carcass Sales

- **Wafer/Die Material**

- Any wafer sale may be accompanied by a Wafer Map or Bonding diagram if requested.
 - Product Categories: Micron Prime, SpecTek First Pass, Second Pass, Half Good
 - After Sales Support: SpecTek Maps, Bonding Diagram or die datasheets when available
 - Wafer/Die MPN Decoder: https://www.spectek.com/pdfs/SpecTek_pns_Wafer_Die.pdf

- **Carcass Wafers**

- Carcass is the die left on the blue tape after Micron and SpecTek have removed any die that they wish to process.
- Please be aware that Carcass wafers are the lowest level of product that SpecTek sells. Use the datasheet from the same Cell Technology and Process Node for reference purposes only.
- No warranty of any kind is provided.

References

RMA: All quality and RMA requests will need to go through the RMA rapid response page:

- [RMA Rapid Response](#)

MPN Decoders:

- [Mobile DRAM Decoder](#)
- [All-in-One Decoder](#)
- [eMMC Decoder](#)
- [NAND MCP Decoder](#)
- [LPDRAM Wafer/Die](#)
- [Online Decoder](#)

Sample Request Form:

- [Mobile Sample Request Page](#)

Datasheets and More on [SpecTek Mobile](#) page...

