

Tray Pocket Design Change Proposal for 7x7x1.0 mm QFN packages (from ITW 40707-15-1026-9 or PEAK TX QFN0707 1.0 1026 6 Rev D to Peak TXQFN0707 1.0 1026 6 Rev H)

Freescale Semiconductor August 2013

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Summary of Change

- Freescale has qualified an improved shipment tray design for 7x7x1.0 mm QFN packages.
- The new tray has an improved pocket design which minimizes the rotational free play for the device whilst in the tray.

Only one Critical Dimension Change:

- Small dimensional change to Z-height seating plane
 - ITW to Peak Rev H: 0.20mm deeper
 - Peak Rev D to Peak Rev H: 0.15mm deeper
- Non-Critical Changes:
 - Tray Pocket Fence design
 - End-Tab markings
 - Color strip removal (for Peak Rev D tray)
 - Anti-reverse/interlock design & location
- Note: NO CHANGE to pocket pitch and matrix



Tray Qualification Testing Results - PASSED

- Dimensional qualification (Tray's length, width, thickness, pocket pitch)
- Stacked Tray Alignment
- Surface Resistivity
- 3-Point Bending
- Bake / Warpage
- Strapping
- Drop
- Functional Line

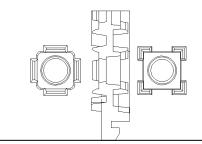


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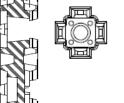
Tray Pocket Features (Pocket Fence)

- Peak TX QFN0707 1.0 1026 6 REV.D (Current)
- Side Fence Support on Top
- Corner Fence Support on Bottom



- ITW 40707-15-1026-9 (Current)
- -Corner Fence Support on Top
- Side Fence Support on Bottom

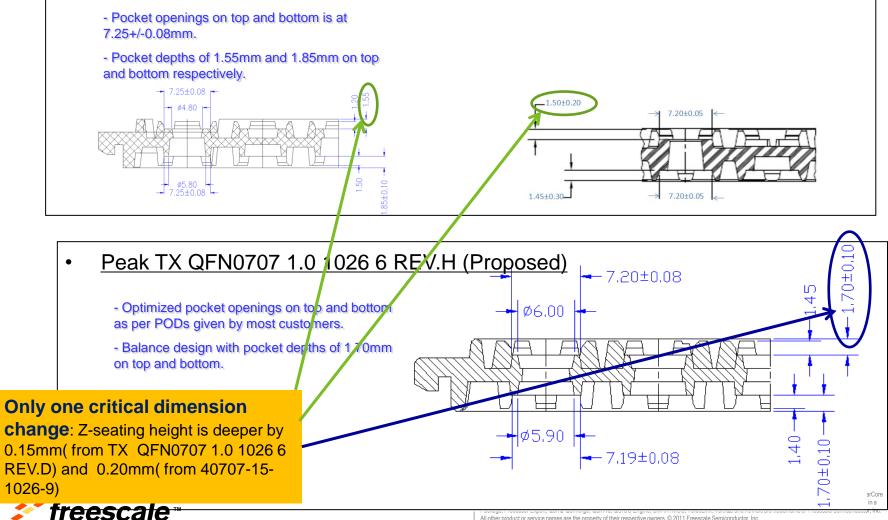




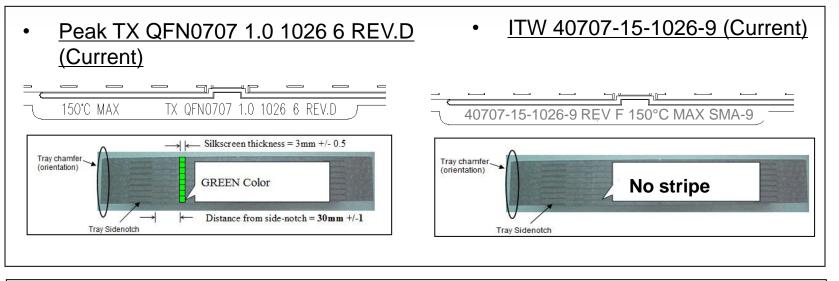
Peak TX QFN0707 1.0 1026 6 REV.H (Proposed)
• Multi-Fence Support on Top:
• Multi-Fence Support on Bottom

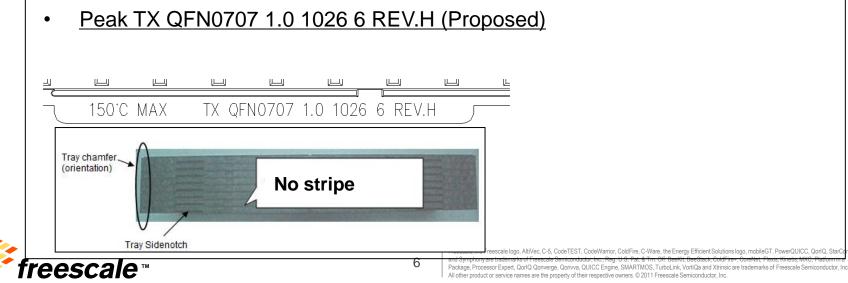
Pocket Cavity Dimensions (Pocket Dimensions & Tolerances)

Peak TX QFN0707 1.0 1026 6 REV.D (Current) ITW 40707-15-1026-9 (Current)



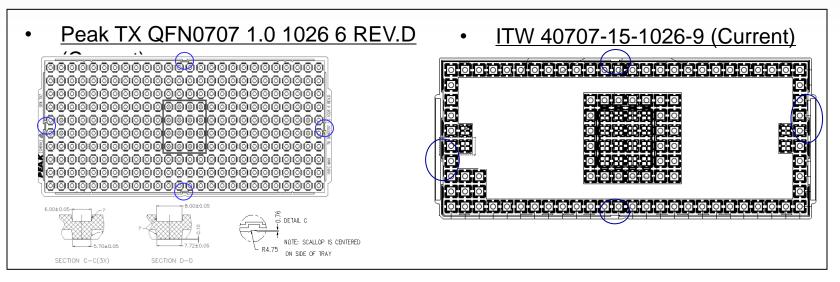
Non-Critical Features (End Tab Marking, Stripe Color, etc)

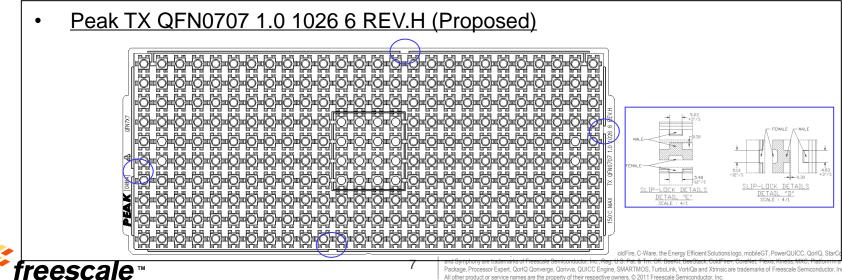






Other Non-Critical Features (Anti-reverse / Interlocks)





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Benefit – Minimize rotational free-play

Top Pocket

Bottom Pocket

