

Proposal for Modified Upper PSD Mask

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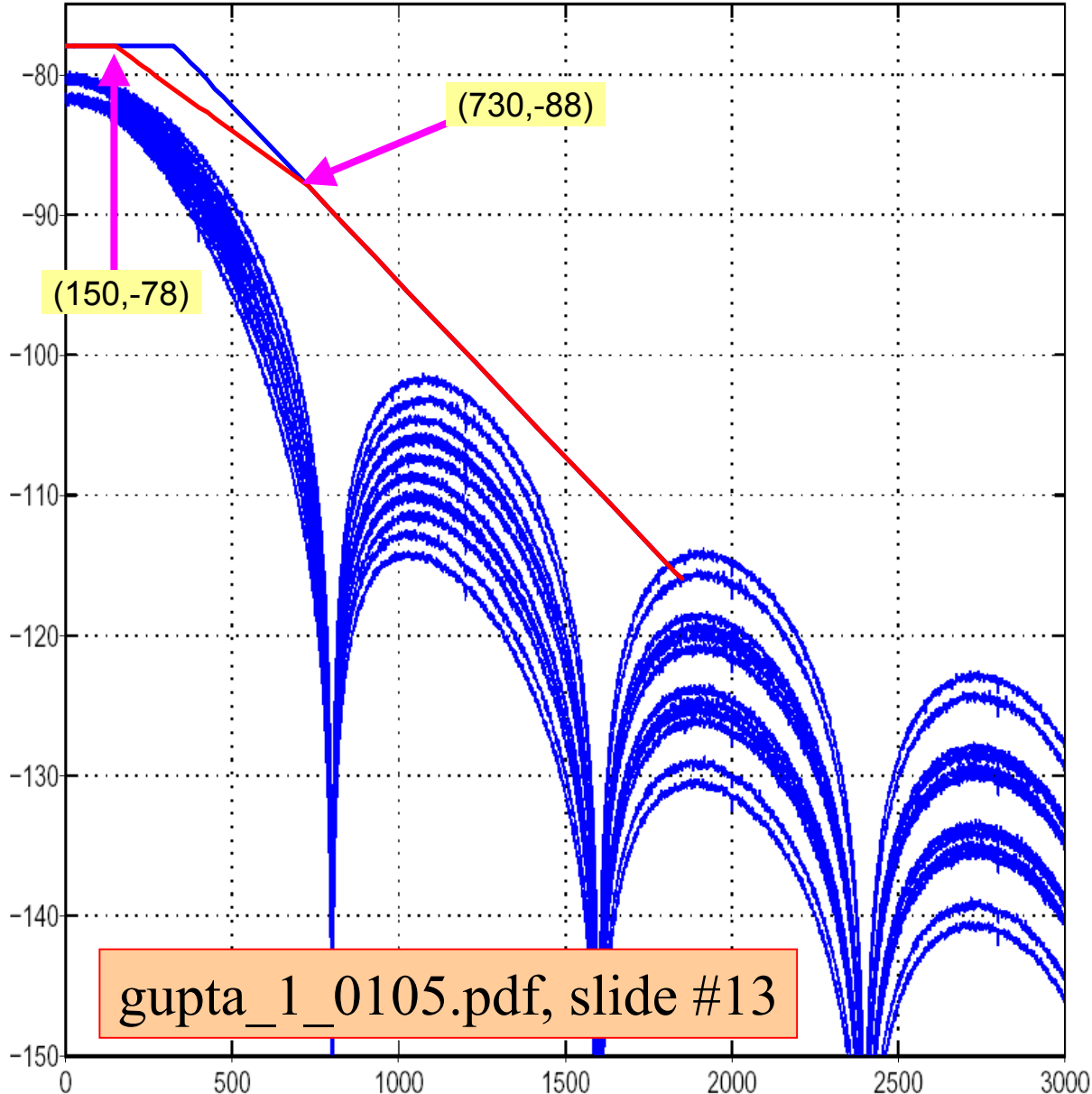
SYSTIMAX® Solutions

March 15, 2005

Proposed Modification to 55.5.6: Upper PSD Mask

- The current upper PSD mask is a 2-piece linear equation. This results in an unnecessary sharp edge at 330 MHz.
- Simulations performed by Teranetics show that typical implementations will have substantial margin to this 2-piece PSD mask around 330 MHz (slide #13 of gupta_1_0105.pdf).
- We should tighten the specification to ensure implementations are more constrained to enhance interoperability and assure better EMC performance.

Proposed Modification of Upper PSD Mask to 3-piece linear



Current Upper PSD:

$$\begin{array}{ll} -78 & 1 \leq f \leq 330 \\ -78 - (f - 330)/40 & 330 < f \leq 1850 \end{array}$$

Proposed Upper PSD:

$$\begin{array}{ll} -78 & 1 \leq f \leq 150 \\ -78 - (f - 150)/58 & 150 < f \leq 730 \\ -78 - (f - 330)/40 & 730 < f \leq 1850 \end{array}$$

Conclusion:

Proposed upper PSD is
3.1 dB tighter at 330 MHz
(assuring better EMC)