

Commit Requests 4p5_3 and 4p5_4

Kent Lusted, Intel Corporation

Ali Ghiasi, Ghiasi Quantum

Upen Reddy Kareti, Cisco

Rich Mellitz, Samtec

4p5_3: COM module NEXT package issue

- Title: NEXT for package taken from transmitter table
- Submitter: Upen Reddy Kareti and Ali Ghiasi
- Description:
 - The NEXT lengths and voltage values for the package is supposed to come from the receiver package. However, the current version of COM takes lengths from the transmitter package (this is incorrect) and the voltages from the receiver (this is correct)
 - Minimal impact observed. $\sim 0.2\text{dB}$

4p5_3: Fix Details

```
read_ParamConfigFile.m -2+2
/src/com_fcts/read_ParamConfigFile.m

-----

553 553     end
554 554     tx_rx_fields = {'C_pkg_board' 'R_diepad'};
555 555     tx_rx_fields_matrix = {'pkg_Z_c'};
556     - tx_fields = {'z_p_tx_cases' 'z_p_next_cases' 'z_p_fext_cases' 'pkg_gamma0_a1_a2' 'pkg_tau' 'a_thru' 'a_fext'};
557     - rx_fields = {'z_p_rx_cases' 'a_next'};
      556 + tx_fields = {'z_p_tx_cases' 'z_p_fext_cases' 'pkg_gamma0_a1_a2' 'pkg_tau' 'a_thru' 'a_fext'};
      557 + rx_fields = {'z_p_rx_cases' 'a_next' 'z_p_next_cases'};
558 558     tx_pkg_name=param.PKG_NAME{1};
559 559     rx_pkg_name=param.PKG_NAME{2};
560 560     tx_pkg_struct=param.PKG.(tx_pkg_name);
```

4p5_4: RXFFE floating tap index report error

- Title: RXFFE floating tap index report error
- Submitter: Upen Reddy Kareti and Howard Heck
- Description:
 - The reported location of floating taps does not match the locations of the reported coefficient values

4p5_4: Fix Details

```
MMSE.m -1+1  
/src/com_fcts/MMSE.m  
-----  
76 76     else  
77 77         C=Craw;  
78 78     end  
79         - MMSE_results.floating_tap_locations=idx;  
           + MMSE_results.floating_tap_locations=idx-param.N_tail_start+1+Nfix;  
80 80     MMSE_results.C=C;  
81 81
```