

PRODUCT CHANGE NOTIFICATION

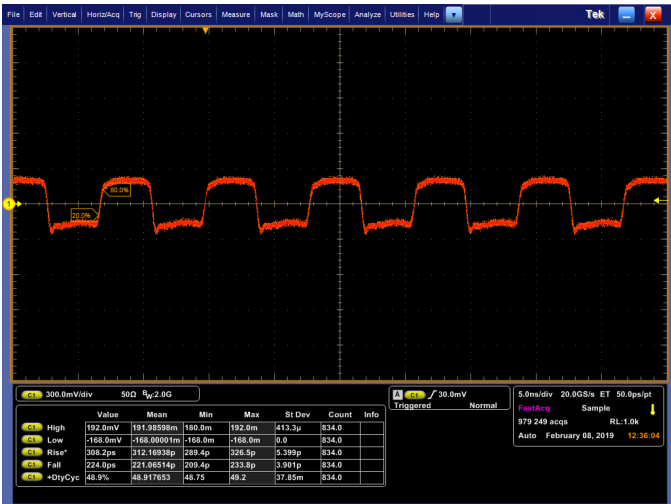
Title	Notification of change in IC used to manufacture PE77D, PE55D, and PE44D series.
Keywords	Product Change Notification: IC change in PEXXD series to next generation IC due to the end of life notice for the current IC.
Article:	<u>Products Affected: Pletronics PE77D, PE55D, and PE44D</u> <u>Description and Purpose of Change:</u> IC change to next generation IC due to end of life notice of the current generation. Oscillator performance will remain unchanged. This notice is written in accordance with Pletronics ISO requirements. • Form, fit and function equivalent • Comparable rise and fall time • Improved phase noise and jitter performance • Improved spectral/EMI performance • Reduced lead time • See data below for comparison • The current generation of the IC has been discontinued • Last time order date for current generation 2021-08-30 • Last time delivery date for the current generation IC will be 2021-12-31 Pletronics Inc. certifies this device is in accordance with the RoHS (2015/65/EC) and WEEE (2002/96/EC) directives.
Date Created	2019-04-03, Updated 2021-01-30
Created By	Pletronics Engineering

PECL 125.0MHz 2.5V Waveform



Current generation

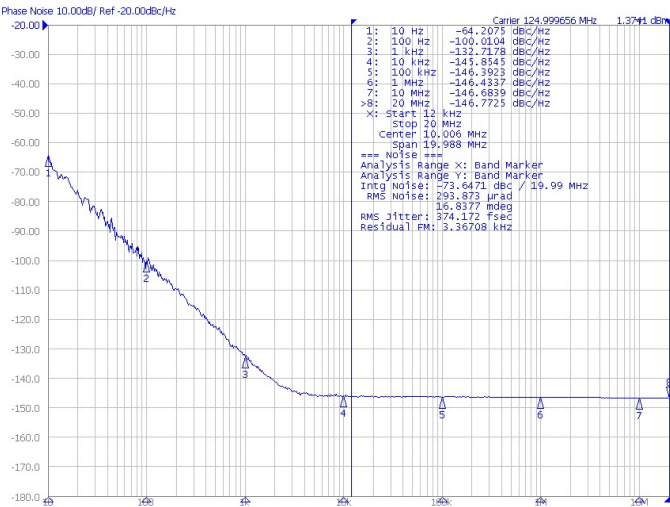
Rise Time	351 ps
Fall Time	375 ps



Next generation

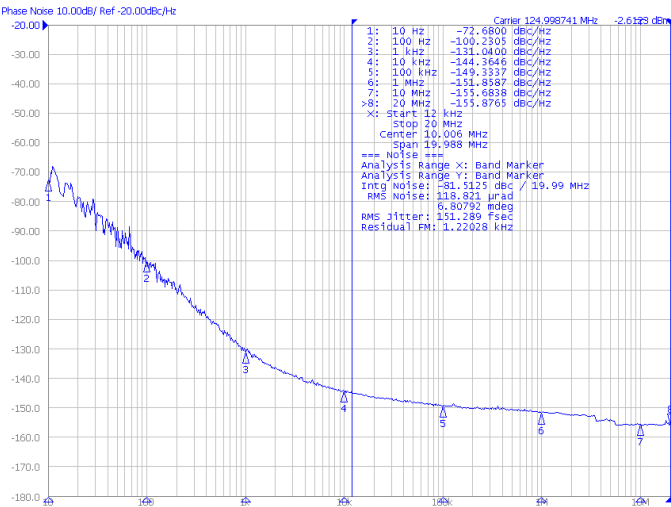
Rise Time	313 ps
Fall Time	222 ps

PECL 125.0MHz 2.5V Phase Noise



Current generation

10 Hz	-64 dBc/Hz
100 Hz	-100 dBc/Hz
1 kHz	-132 dBc/Hz
10 kHz	-145 dBc/Hz
100 kHz	-146 dBc/Hz
1 MHz	-146 dBc/Hz
10 MHz	-146 dBc/Hz



Next generation (Improved performance)

10 Hz	-72 dBc/Hz
100 Hz	-100 dBc/Hz
1 kHz	-131 dBc/Hz
10 kHz	-144 dBc/Hz
100 kHz	-149 dBc/Hz
1 MHz	-151 dBc/Hz
10 MHz	-155 dBc/Hz

PECL 125.0MHz 3.3V Waveform



Current generation

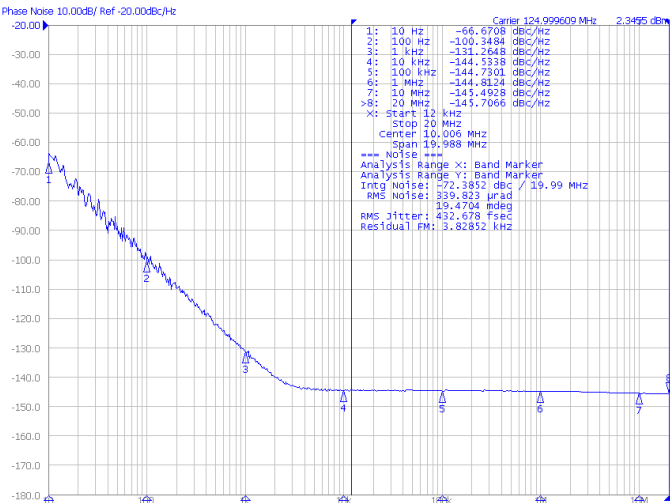
Rise Time	392 ps
Fall Time	415 ps



Next generation

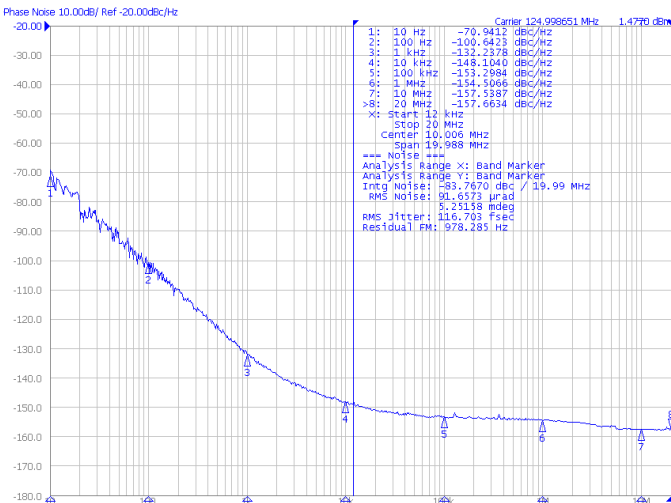
Rise Time	263 ps
Fall Time	204 ps

PECL 125.0MHz 3.3V Phase Noise



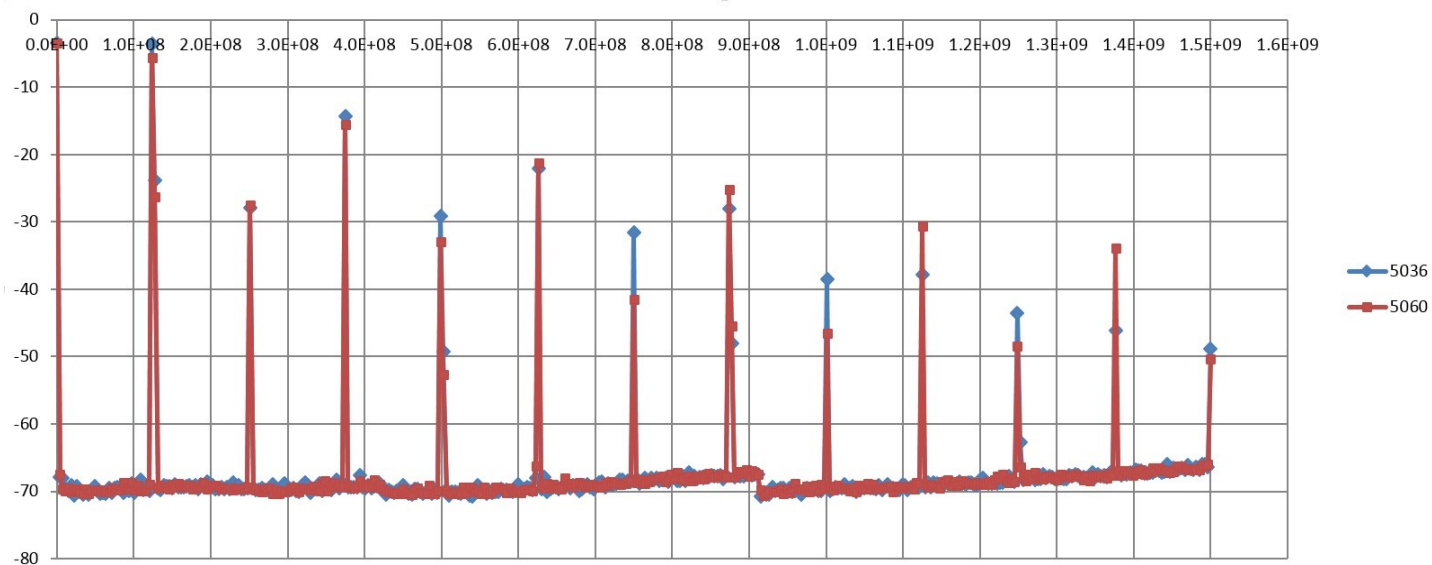
Current generation

10 Hz	-66 dBc/Hz
100 Hz	-131 dBc/Hz
1 kHz	-144 dBc/Hz
10 kHz	-144 dBc/Hz
100 kHz	-144 dBc/Hz
1 MHz	-144 dBc/Hz
10 MHz	-145 dBc/Hz



Next generation (Improved performance)

10 Hz	-70 dBc/Hz
100 Hz	-100 dBc/Hz
1 kHz	-132 dBc/Hz
10 kHz	-148 dBc/Hz
100 kHz	-153 dBc/Hz
1 MHz	-154 dBc/Hz
10 MHz	-157 dBc/Hz



Current generation

0	-3.482
1.24E+08	-3.553
2.51E+08	-27.917
3.75E+08	-14.261
4.99E+08	-29.134
6.26E+08	-22.101
7.5E+08	-31.635
8.74E+08	-28.042
1E+09	-38.468
1.13E+09	-37.790
1.25E+09	-43.543
1.38E+09	-46.146
1.5E+09	-48.839

Next generation

0	-3.487
1.24E+08	-5.592
2.51E+08	-27.506
3.75E+08	-15.61
4.99E+08	-33.013
6.26E+08	-21.206
7.5E+08	-41.487
8.74E+08	-25.179
1E+09	-46.509
1.13E+09	-30.642
1.25E+09	-48.412
1.38E+09	-33.922
1.5E+09	-50.288