



## PRODUCT CHANGE NOTIFICATION

<b>Title</b>	Notification of change in IC used to manufacture LV77D, LV55D, and LV44D series
<b>Keywords</b>	Product Change Notification: IC change LVXXD series to next generation IC due to the end of life notice for the current IC.
<b>Article:</b>	<b><u>Products Affected: Pletronics LV77D, LV55D, and LV44D</u></b>
<b>Description and Purpose of Change:</b> 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.	
<ul style="list-style-type: none"><li>• Form, fit and function equivalent</li><li>• Comparable rise and fall time</li><li>• Improved phase noise and jitter performance</li><li>• Improved spectral / EMI performance</li><li>• Reduced lead time</li><li>• See data below for comparison</li><li>• The current generation of the IC has been discontinued</li><li>• <b>Last time order date for the current generation 2021-08-30</b></li><li>• <b>Last time delivery date for the current generation IC will be 2021-12-31</b></li></ul>	
<p><b>Pletronics Inc. certifies this device is in accordance with the RoHS (2015/65/EC) and WEEE (2002/96/EC) directives.</b></p>	

<b>Date Created</b>	2019-04-03, Updated 2021-01-29
<b>Created By</b>	Pletronics Engineering

## LVDS 156.25MHz 2.5V Waveform



Current generation

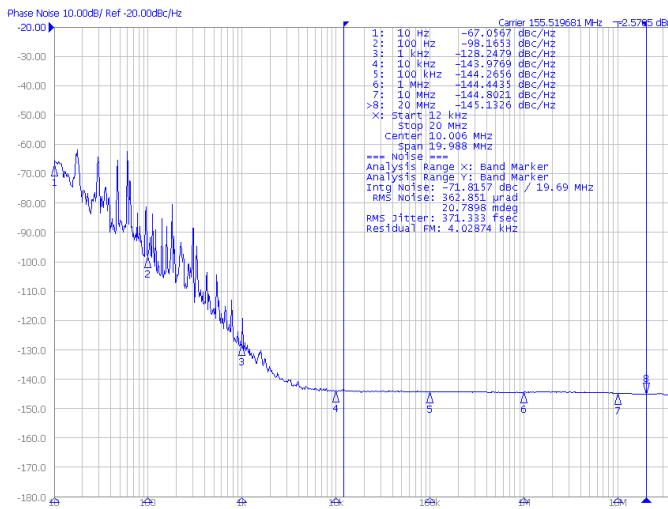


Next generation

Rise Time	300 ps
Fall Time	340 ps

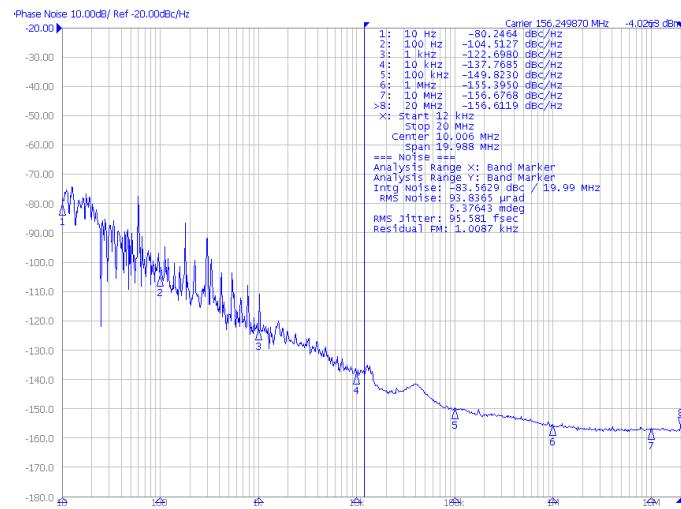
Rise Time	335 ps
Fall Time	377 ps

## LVDS 156.25MHz 2.5V Phase Noise



Current generation

10 Hz	-67 dBc/Hz
100 Hz	-98 dBc/Hz
1 kHz	-128 dBc/Hz
10 kHz	-143 dBc/Hz
100 kHz	-144 dBc/Hz
1 MHz	-144 dBc/Hz
10 MHz	-144 dBc/Hz



Next generation (Improved performance)

10 Hz	-80 dBc/Hz
100 Hz	-104 dBc/Hz
1 kHz	-122 dBc/Hz
10 kHz	-137 dBc/Hz
100 kHz	-149 dBc/Hz
1 MHz	-155 dBc/Hz
10 MHz	-156 dBc/Hz

## LVDS 156.25MHz 3.3V Waveform



Current generation

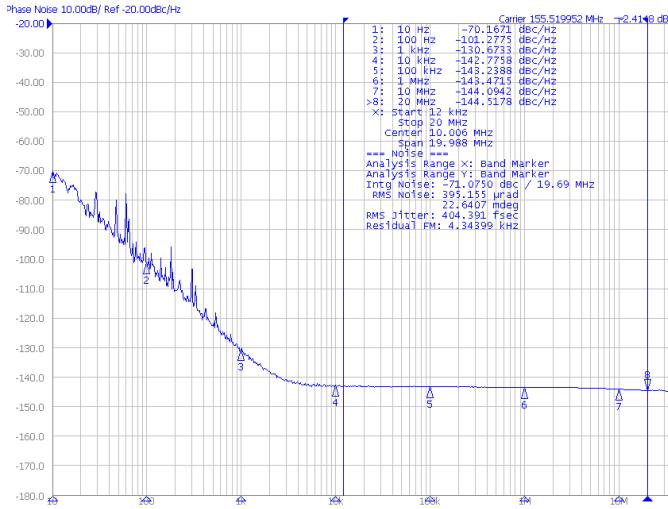
Rise Time	323 ps
Fall Time	363 ps



Next generation

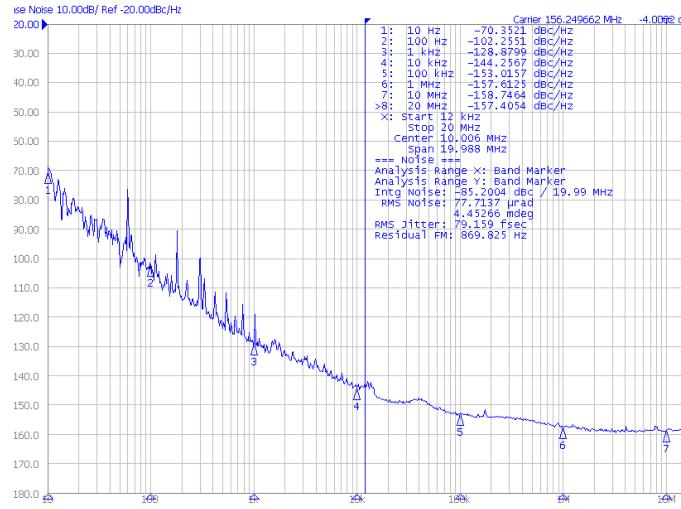
Rise Time	292 ps
Fall Time	360 ps

## LVDS 156.25MHz 3.3V Phase Noise



Current generation

10 Hz	-70 dBc/Hz
100 Hz	-101 dBc/Hz
1 kHz	-130 dBc/Hz
10 kHz	-142 dBc/Hz
100 kHz	-143 dBc/Hz
1 MHz	-143 dBc/Hz
10 MHz	-144 dBc/Hz



Next generation (Improved performance)

10 Hz	-70 dBc/Hz
100 Hz	-102 dBc/Hz
1 kHz	-128 dBc/Hz
10 kHz	-144 dBc/Hz
100 kHz	-153 dBc/Hz
1 MHz	-157 dBc/Hz
10 MHz	-158 dBc/Hz



Current generation

0	-3.490
1.58E+08	-10.000
3.11E+08	-36.800
4.65E+08	-21.600
6.23E+08	-38.000
7.76E+08	-28.200
9.34E+08	-41.900
1.09E+09	-37.600
1.25E+09	-45.600
1.4E+09	-46.200

Next generation (Improved performance)

0	-3.489
1.58E+08	-9.771
3.11E+08	-35.626
4.69E+08	-21.439
6.26E+08	-45.039
7.8E+08	-28.132
9.38E+08	-59.781
1.1E+09	-35.95
1.25E+09	-58.179
1.41E+09	-39.591