NOAO

ENGINEERING CHANGE ORDER

BOARD NAME	TORRENT Local Control Board (LCB)		ECO#	**TRNT-039**	DATE 8/07/2014
BRD SERL#	ALL	REV	ART#		
PN#		REV			REV
ASBLY#	TRNT-EL-04-0002	REV B	PCB#		REV
BOM#	TRNT-EL-04-4002	REV B	SCH#	TRNT-EL-04-2002	REV B
COGNIZANT ENGNR	Peter Moore		CHARGE#		

REASON FOR MODIFICATION:

1. Decrease system clock jitter by optimizing the clock generator PLL loop filter (U28).

DRAWINGS AFFECTED:	NEW REV
TRNT-EL-04-2002 B	B1

DESCRIPTION OF MODIFICATION:

1. Change C254 from 10nF to 1.5nF
2. Change C255 from 5.6nF to 15pF
3. Change R254 from 3.65K Ohms to 2.74K

See new TI data sheet - http://www.ti.com/product/lmk03000?keyMatch=lmk03000&tisearch=Search-EN

The newer TI data sheet provides corrected information for the device relative to the original National Instruments version of the data sheet.

New code block for firmware download (Torrent_FPGA_V224 and later) provides for the R3/C3 & R4/C4 settings and a change in the CP Gain value.