

ETERNA (TM) CASTELLATED MOTE WITH MMCX CONNECTOR

Content:

1. Title Page
2. Eterna Mote-on-Chip
3. Castellations
4. Battery Holder and Accelerometer Options

Notes:

1. Assembly Options:
 - 1.a) X1 & X5: installed crystals (32kHz and 20 MHz resp.)
 - 1.b) R12 TCK termination not installed
 - 1.c) Battery holder not installed
 - 1.d) Accelerometer not installed

2. Associated Documents



PCB FAB
600-0176 REV3



BOM
700-0220 REV2



ASY DWG
705-0176 REV3

Revision History:

Rev	Description	ECO	Author
01	Initial release Based on 700-0176 rev4 using LTC5800IWR-IPRA	1226	CN
02	Change 32kHz & 20MHz XTAL	1394	RMP



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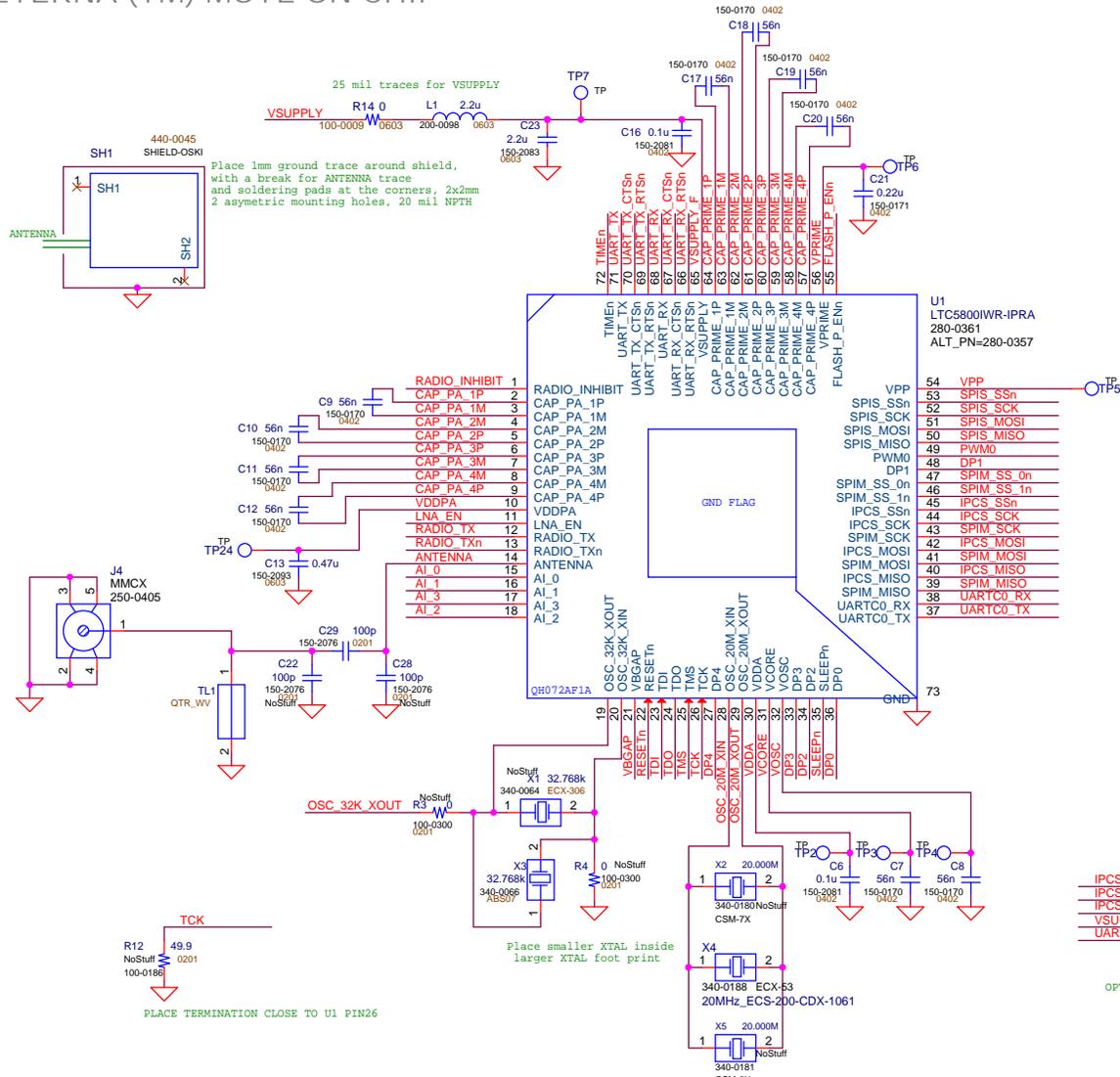
CUSTOMER NOTICE

LINEAR TECHNOLOGY HAS MADE A BEST EFFORT TO DESIGN A CIRCUIT THAT MEETS CUSTOMER-SUPPLIED SPECIFICATIONS; HOWEVER, IT REMAINS THE CUSTOMER'S RESPONSIBILITY TO VERIFY PROPER AND RELIABLE OPERATION IN THE ACTUAL APPLICATION. COMPONENT SUBSTITUTION AND PRINTED CIRCUIT BOARD LAYOUT MAY SIGNIFICANTLY AFFECT CIRCUIT PERFORMANCE OR RELIABILITY. CONTACT LINEAR TECHNOLOGY APPLICATIONS ENGINEERING FOR ASSISTANCE.

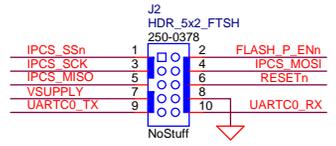
THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND IS SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS.

CONTRACT NO.		Linear Technology Corporation 1630 McCarthy Blvd. Phone: (408)432-1900 Milpitas, CA 95035 Fax: (408)434-0507
APPROVALS		
DRAWN:		TITLE: LTP5902IPC-IPRC PCA SCH, ETERNA IP CAST. MNGR EXT. MEM, CANADIAN
CHECKED:		
APPROVED:		
ENGINEER:		
DESIGNER:		SIZE A
		DWG NO. 710-0220
		REV 02
DATE: Wednesday, July 29, 2015		SHEET 1 OF 4

ETERNA (TM) MOTE-ON-CHIP



- RADIO_INHIBIT << RADIO_INHIBIT
- VDDPA << VDDPA
- LNA_EN << LNA_EN
- RADIO_TX << RADIO_TX
- RADIO_TXn << RADIO_TXn
- AI_0 << AI_0
- AI_1 << AI_1
- AI_2 << AI_2
- AI_3 << AI_3
- RESETn << RESETn
- TDI << TDI
- TDO << TDO
- TMS << TMS
- TCK << TCK
- DP4 << DP4
- VDDA << VDDA
- VCORE << VCORE
- VOSC << VOSC
- DP3 << DP3
- DP2 << DP2
- SLEEPn << SLEEPn
- DP0 << DP0
- FLASH_P_ENn << FLASH_P_ENn
- VPRIME << VPRIME
- VSUPPLY << VSUPPLY
- UART_RX_RTSn << UART_RX_RTSn
- UART_RX_CTSn << UART_RX_CTSn
- UART_RX << UART_RX
- UART_TX_RTSn << UART_TX_RTSn
- UART_TX_CTSn << UART_TX_CTSn
- UART_TX << UART_TX
- TIMEEn << TIMEEn
- OSC_32K_XOUT << OSC_32K_XOUT
- UARTC0_TX << UARTC0_TX
- UARTC0_RX << UARTC0_RX
- SPIM_MISO << SPIM_MISO
- SPIM_MOSI << SPIM_MOSI
- SPIM_SCK << SPIM_SCK
- SPIM_SS_1n << SPIM_SS_1n
- SPIM_SS_0n << SPIM_SS_0n
- IPCS_MISO << IPCS_MISO
- IPCS_MOSI << IPCS_MOSI
- IPCS_SCK << IPCS_SCK
- IPCS_SSn << IPCS_SSn
- DP1 << DP1
- PWM0 << PWM0
- SPIS_MISO << SPIS_MISO
- SPIS_MOSI << SPIS_MOSI
- SPIS_SCK << SPIS_SCK
- SPIS_SSn << SPIS_SSn

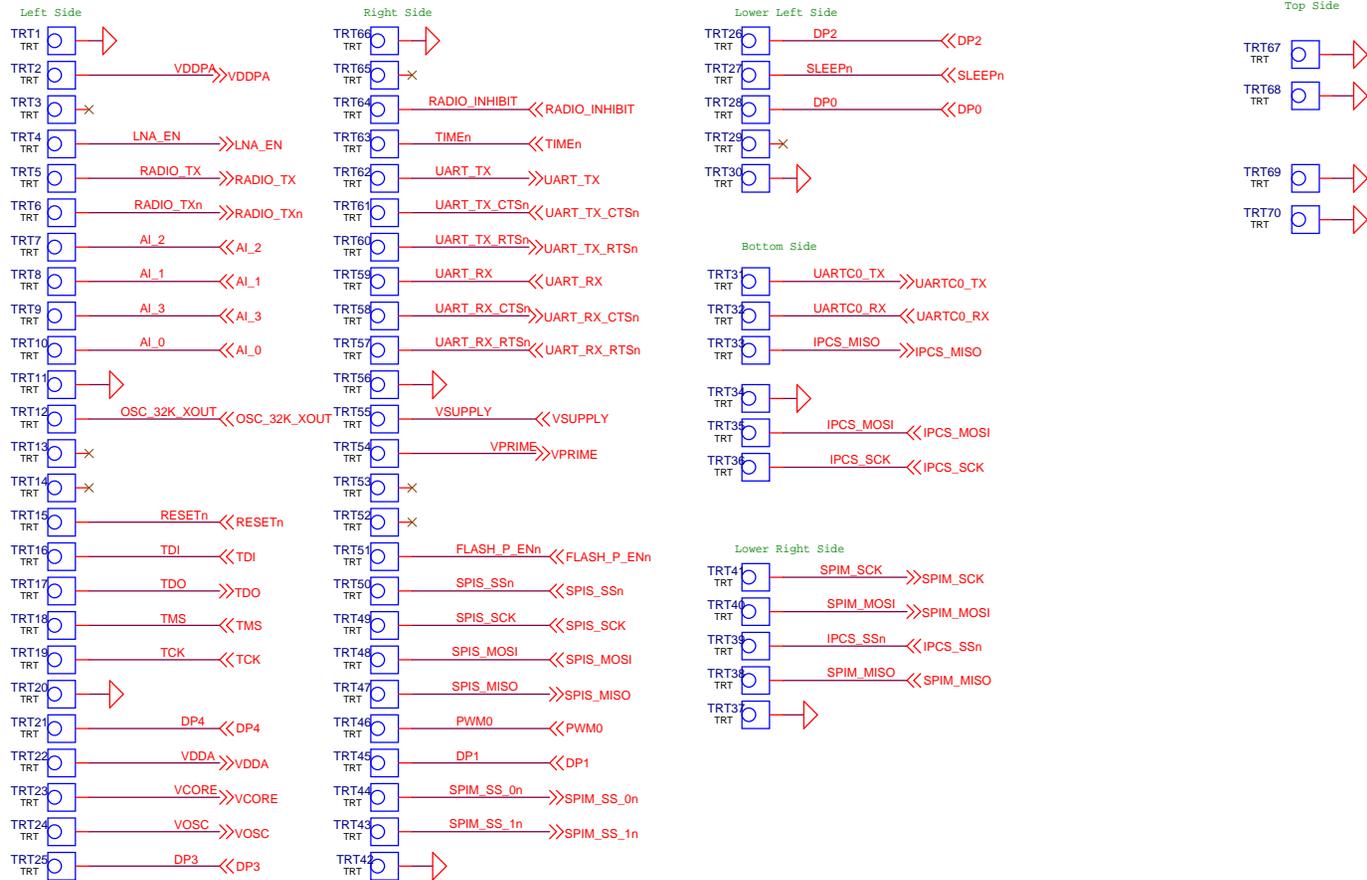


OPTION: STAND-ALONE SPI W/ CLI LOCK/UNLOCK



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		A	710-0220	02	
		DATE:	Wednesday, July 29, 2015		SHEET 2 OF 4

CASTELLATIONS



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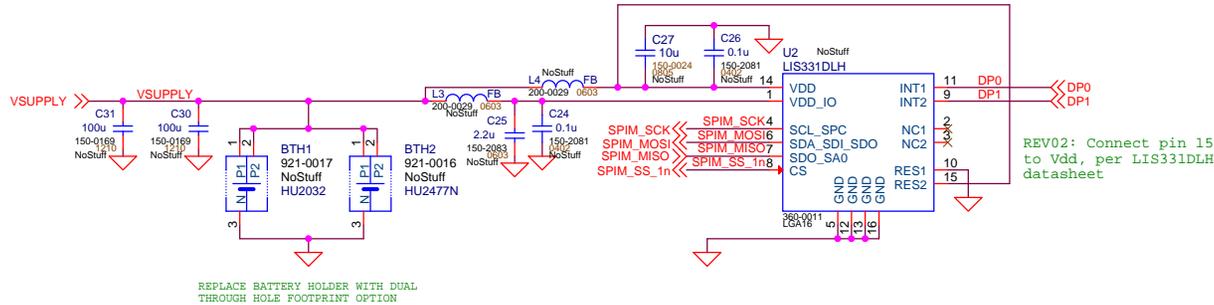
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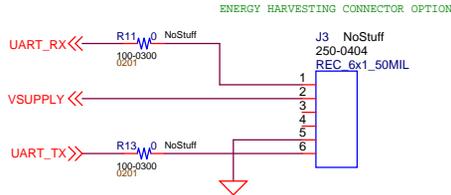
SIZE A	DWG NO. 710-0220	REV 02
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BATTERY HOLDER & ACCELEROMETER OPTIONS



REPLACE BATTERY HOLDER WITH DUAL THROUGH HOLE FOOTPRINT OPTION

REV02: Connect pin 15 to Vdd, per LIS331DLH datasheet



PLACE R11, R13 & J3 ON BOTTOM, MAY INTERFERE WITH BATTERY HOLDER.

J3 SHROUD SHALL PROTRUDE FROM EDGE OF BOARD OPPOSITE TO CHIP ANTENNA. PLACE R11 and R13 NEAR U1 TO MINIMIZE UART_RX AND UART_TX NET LENGTH.



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