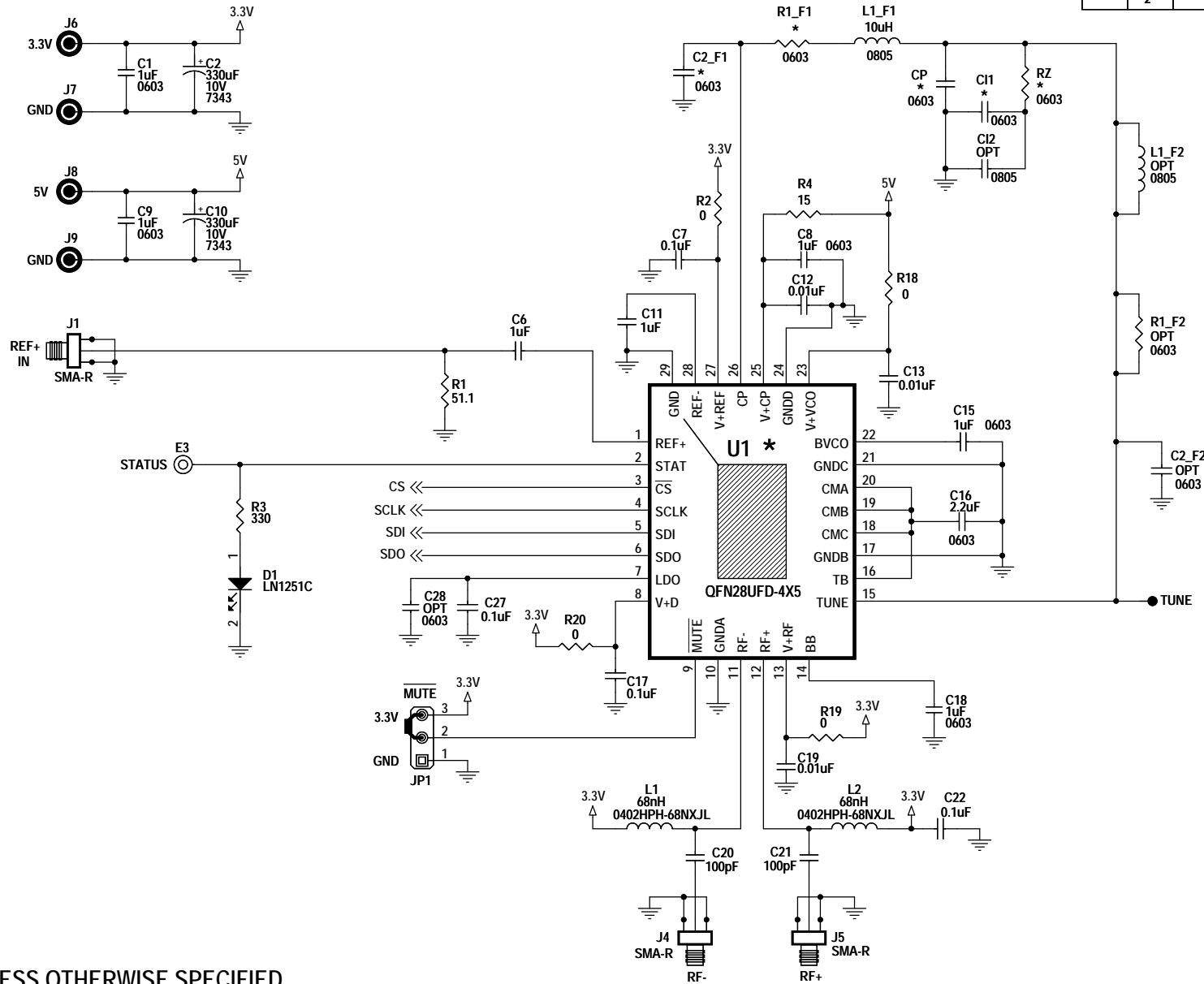


REVISION HISTORY				
ECO	REV	DESCRIPTION	APPROVED	DATE
-	2	PRODUCTION	MICHEL A.	01-27-14



**NOTE: UNLESS OTHERWISE SPECIFIED**

1. ALL RESISTORS ARE IN OHMS, 0402
2. ALL CAPACITORS ARE IN MICROFARADS, 0402

\*

ASSY	U1	VCO	C2_F1	CI1	CP	R1_F1, RZ
A	LTC6948IUFD-1	2.24 TO 3.74 GHz	2.4nF	82nF	3.6nF	57.6
B	LTC6948IUFD-2	3.08 TO 4.91 GHz	2nF	68nF	3nF	63.4
C	LTC6948IUFD-3	3.84 TO 5.79 GHz	1.8nF	56nF	2.4nF	75
D	LTC6948IUFD-4	4.20 TO 6.39 GHz	1.6nF	56nF	2.4nF	76.8

**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 SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS.

**APPROVALS**

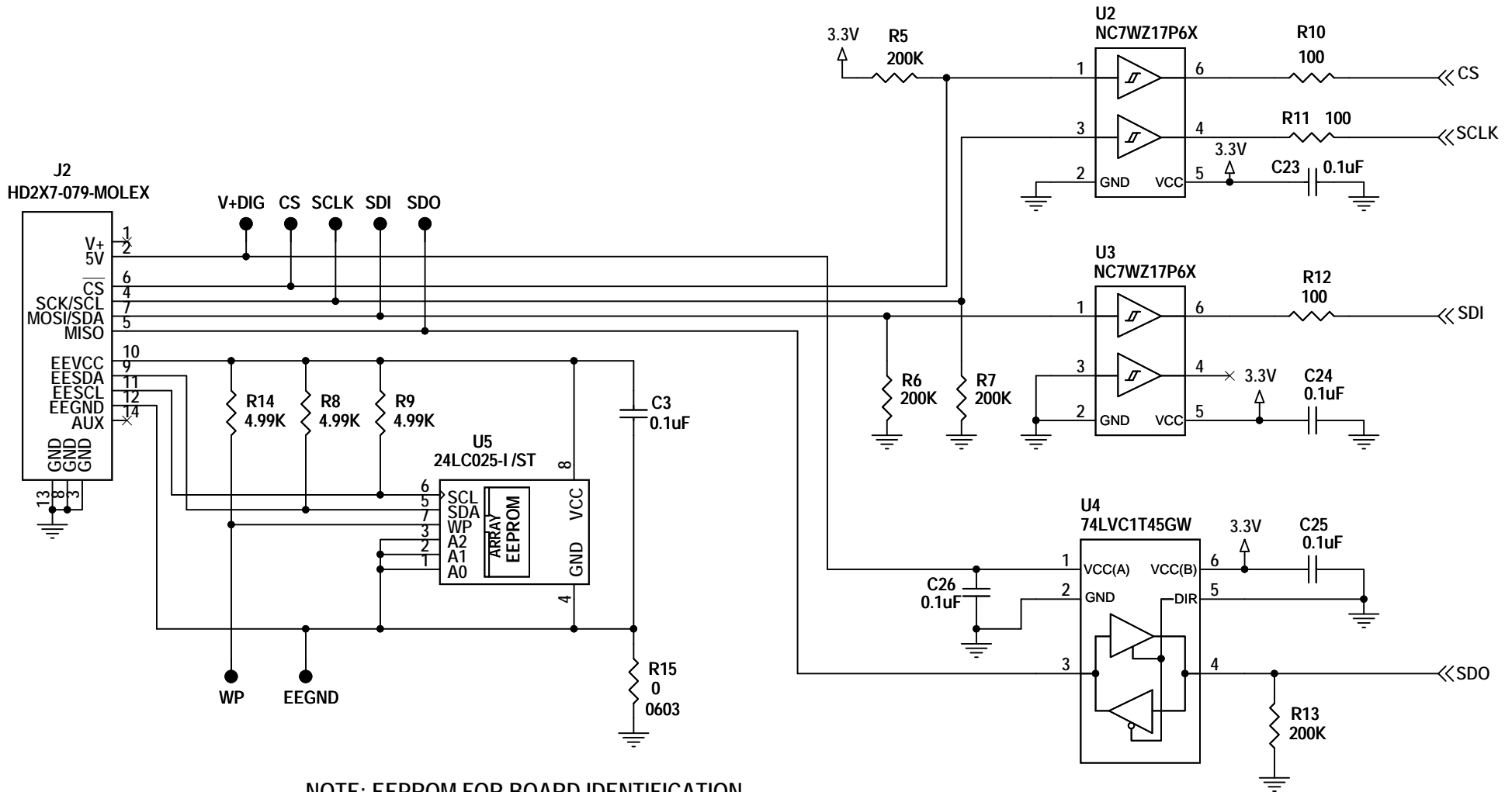
PCB DES.	KIM T.
APP ENG.	MICHEL A.
SCALE	NONE



1630 McCarthy Blvd.  
Milpitas, CA 95035  
Phone: (408)432-1900 www.linear.com  
Fax: (408)434-0507  
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TITLE: SCHEMATIC		
ULTRALOW NOISE & SPURIOUS FRACTIONAL-N SYNTHESIZER WITH INTEGRATED VCO		
SIZE	IC NO.	REV.
N/A	LTC6948IUFD-1/-2/-3/-4	2
DATE: 01/27/2014, 12:05 PM		SHEET 1 OF 2

# DC590 SPI INTERFACE



**NOTE:** EEPROM FOR BOARD IDENTIFICATION

## 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.

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## APPROVALS

PCB DES.	KIM T.
APP ENG.	MICHEL A.

SCALE = NONE



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TITLE: SCHEMATIC

ULTRALOW NOISE & SPURIOUS FRACTIONAL-N  
SYNTHESIZER WITH INTEGRATED VCO

SIZE	IC NO.	REV.
N/A	LTC6948IUFD-1/-2/-3/-4 DEMO CIRCUIT 1959A	2

DATE: 01/27/2014, 11:57 AM

SHEET 2 OF 2