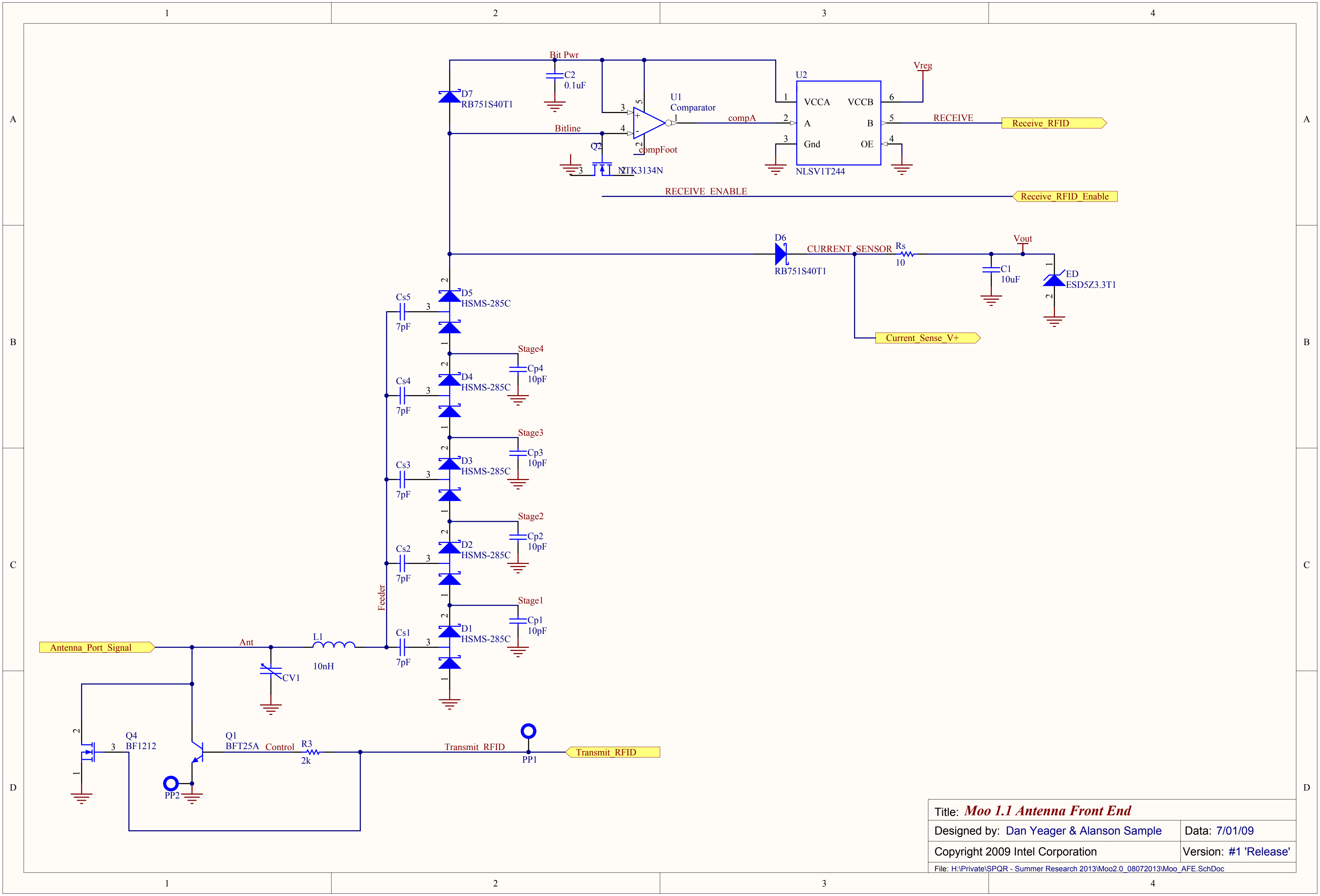


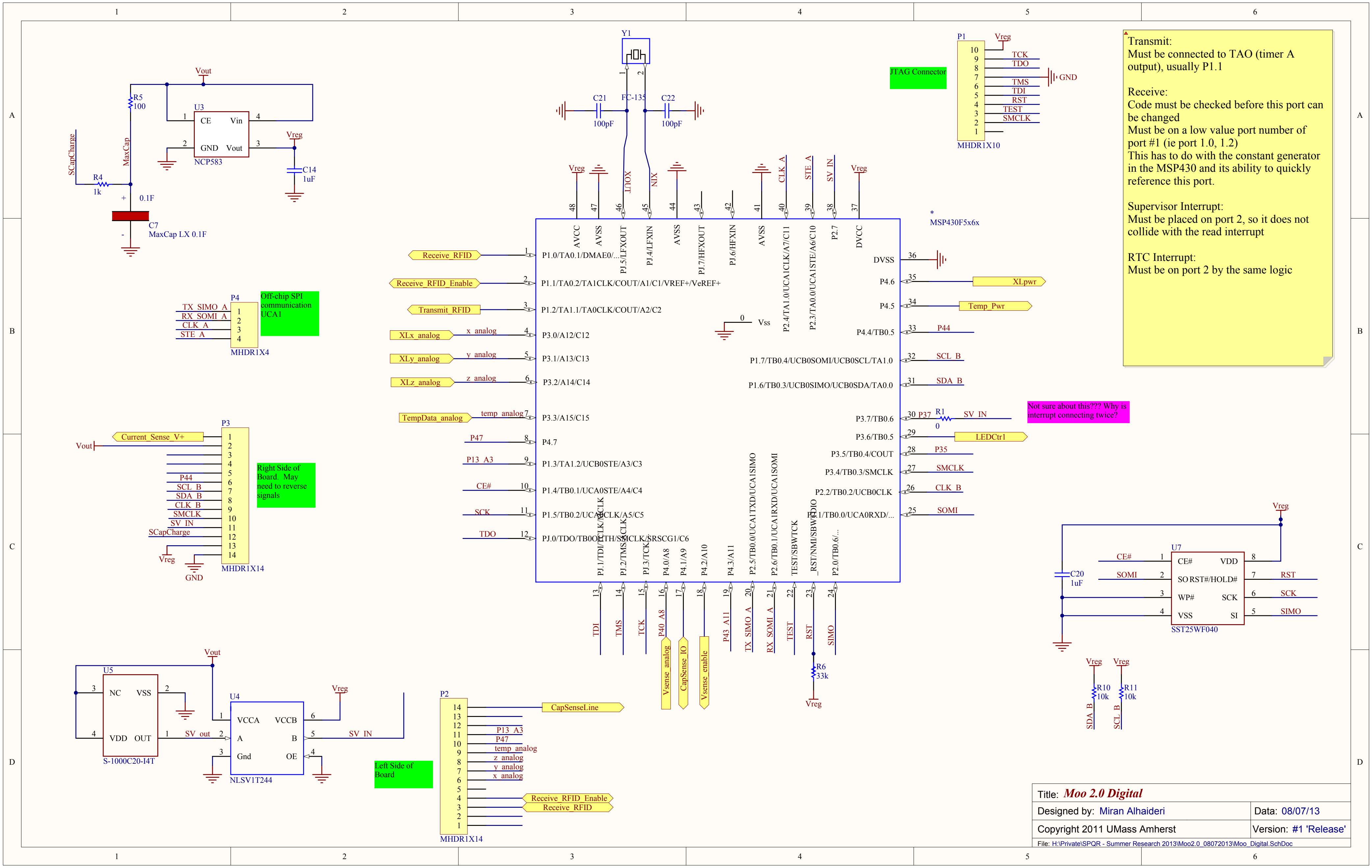
Title: *Moo 1.1 Antenna Front End*

Designed by: Dan Yeager & Alanson Sample

Data: 7/01/09

Version: #1 'Release'

File: H:\Private\SPQR - Summer Research 2013\Moo2.0_08072013\Moo_AFE.SchDoc



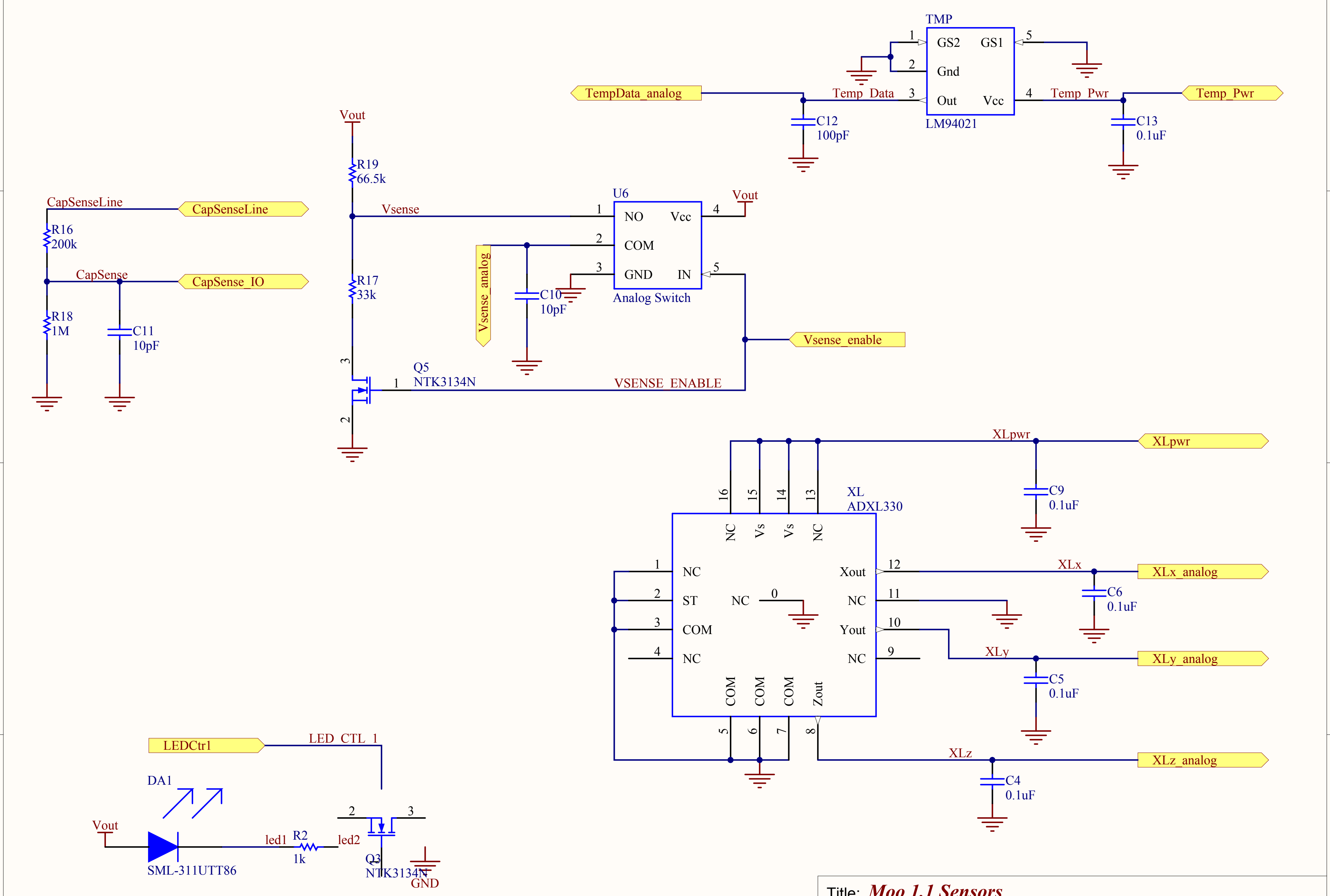
Transmit:
Must be connected to TAO (timer A output), usually P1.1

Receive:
Code must be checked before this port can be changed
Must be on a low value port number of port #1 (ie port 1.0, 1.2)
This has to do with the constant generator in the MSP430 and its ability to quickly reference this port.

Supervisor Interrupt:
Must be placed on port 2, so it does not collide with the read interrupt

RTC Interrupt:
Must be on port 2 by the same logic

Title: *Moo 2.0 Digital*
Designed by: Miran Alhaideri
Data: 08/07/13
Copyright 2011 UMass Amherst
Version: #1 'Release'
File: H:\Private\SPQR - Summer Research 2013\Moo2.0_08072013\Moo_Digital.SchDoc



Title: ***Moo 1.1 Sensors***

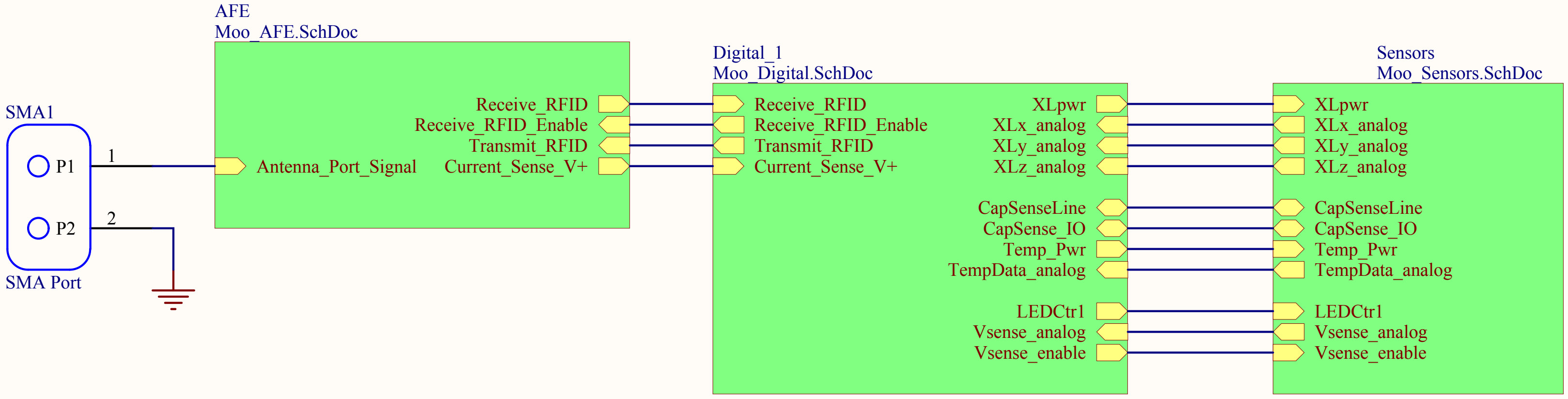
Designed by: Dan Yeager & Alanson Sample

Data: 7/01/09

Copyright 2009 Intel Corporation

Version: #7 'Release'

File: H:\Private\SPQR - Summer Research 2013\Moo2.0_08072013\Moo_Sensors.SchDoc



PCB Layout Rules and Guidelines

5x5 Routing
5mil clearance
5mil trace width
8mil trace width preferred

Via 8x12
Hole size 8mil annular ring 12mil

Prototron rules hole size plus 2mils of annular on either size (hole+4mil).
More annular is needed for vias and probe points that will be man handled and repeatedly soldered and re-soldered

RF Signals
(Above routing rules only valid for low frequency signals or digital I/O)

RF need larger vias and careful routing

Trace Thickness

1/2 oz.	0.7 mils
1 oz.	1.4 mils
2 oz.	2.8 mils

Title: ***Moo Top***
Designed by: Hong Zhang & Jeremy Gummeson
Data: 08/06/10
Copyright 2010 UMass Amherst
Version: #1 'Release'
File: H:\Private\SPQR - Summer Research 2013\Moo2.0_08072013\Moo_Top.SchDoc