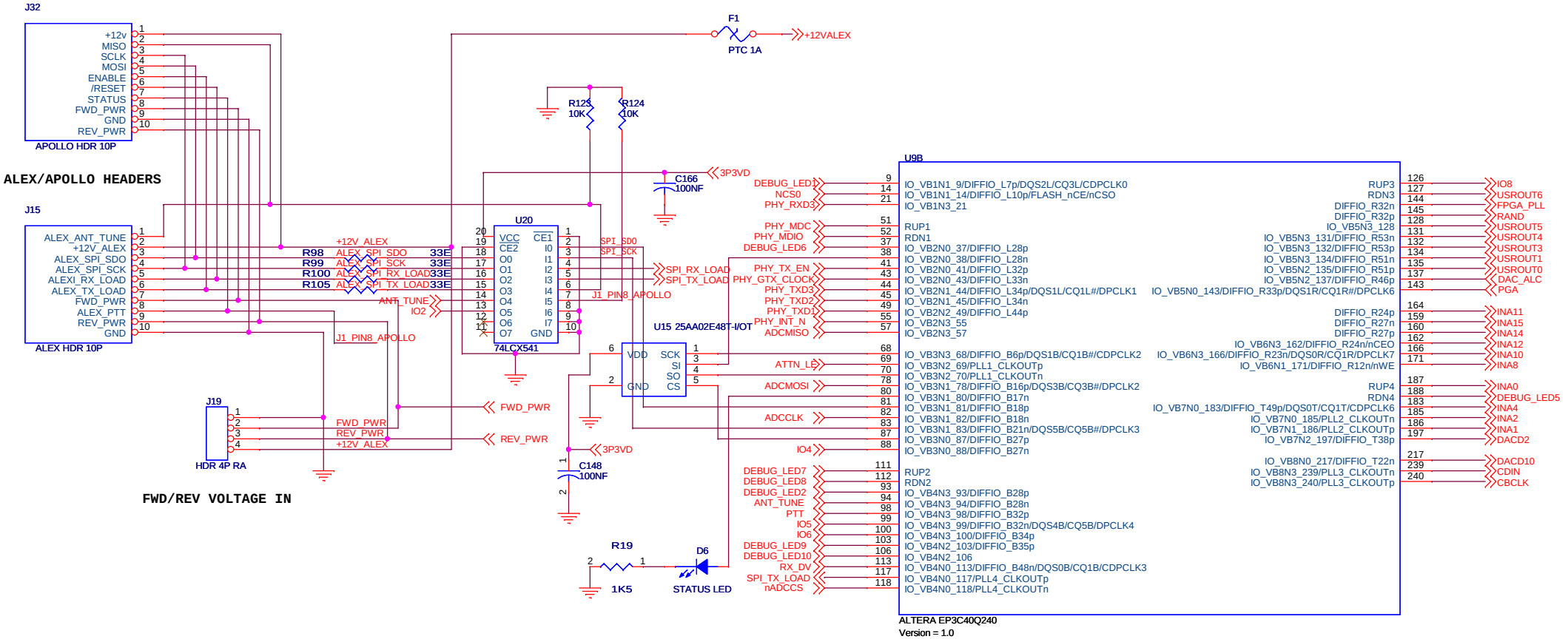
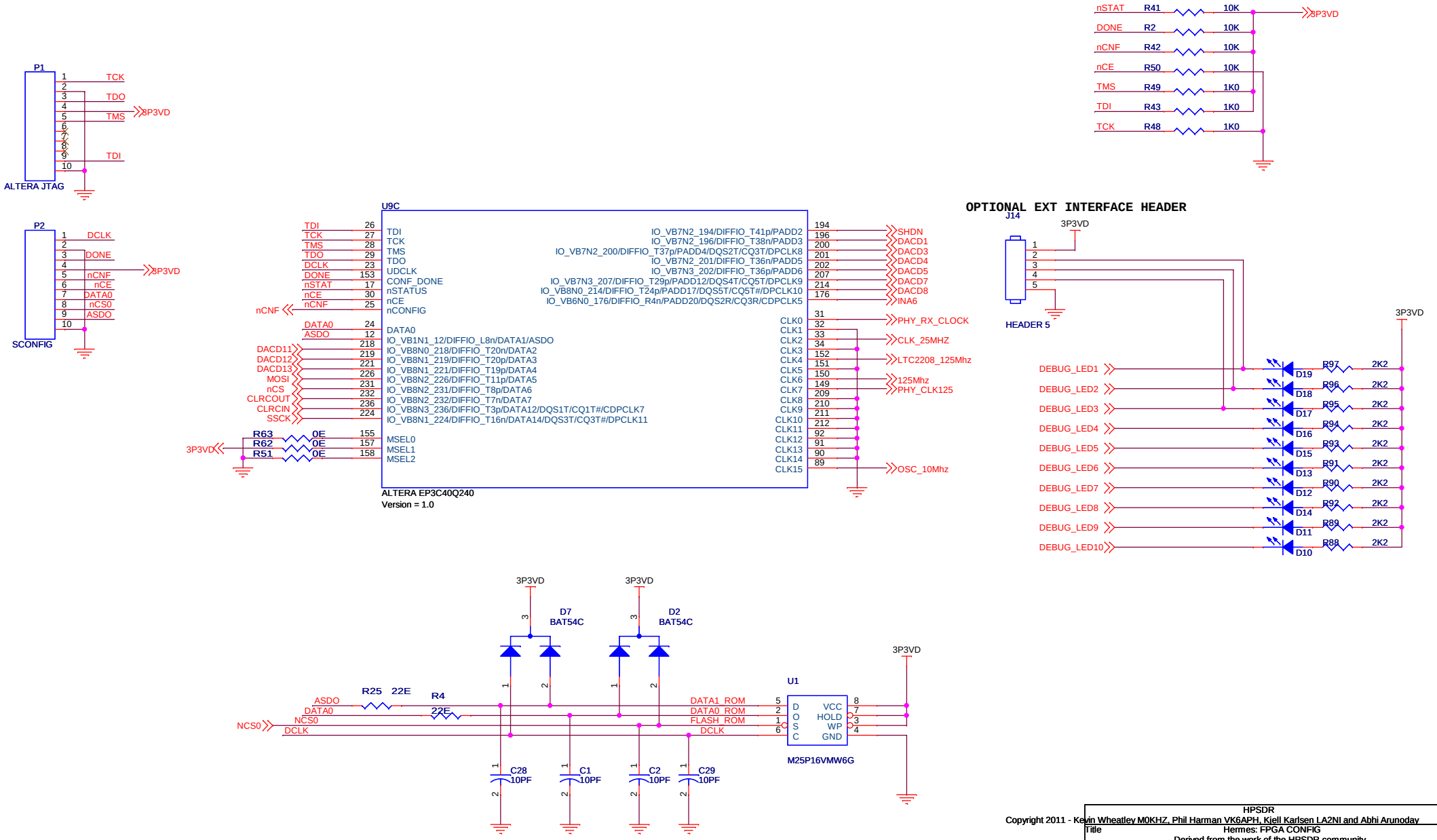


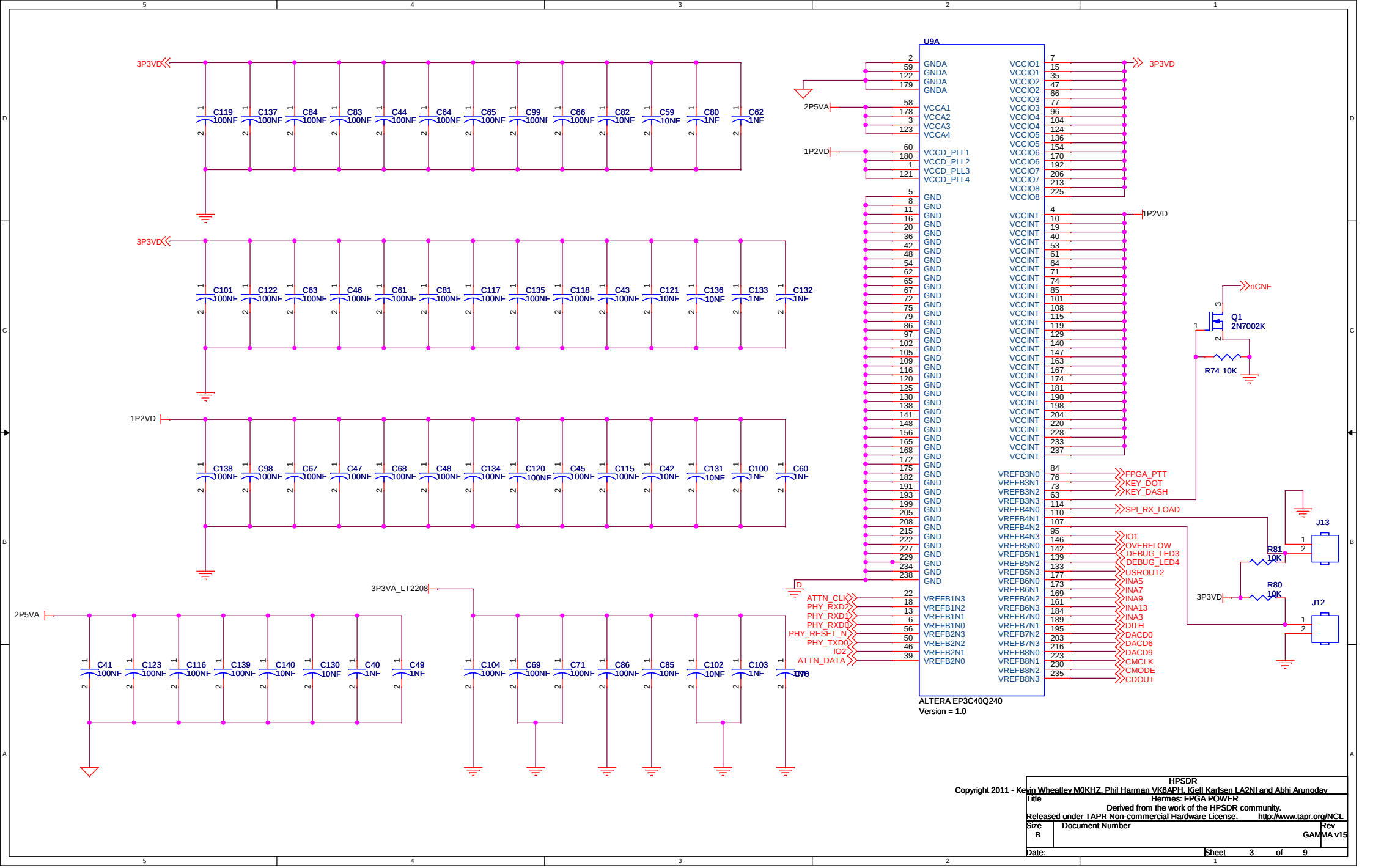
Copyright 2011 - Kevin Wheatley M0KHZ, Phil Harman VK6APH, Kjell Karlsen LA2NI and Abhi Arunoday

HPSDR		
Title	Hermes: FPGA Derived from the work of the HPSDR community. Released under TAPR Non-commercial Hardware License. http://www.tapr.org/NCL	
Size: Custom	Document Number	Rev: GAMMA v1.5
Date:	Sheet 1 of 9	



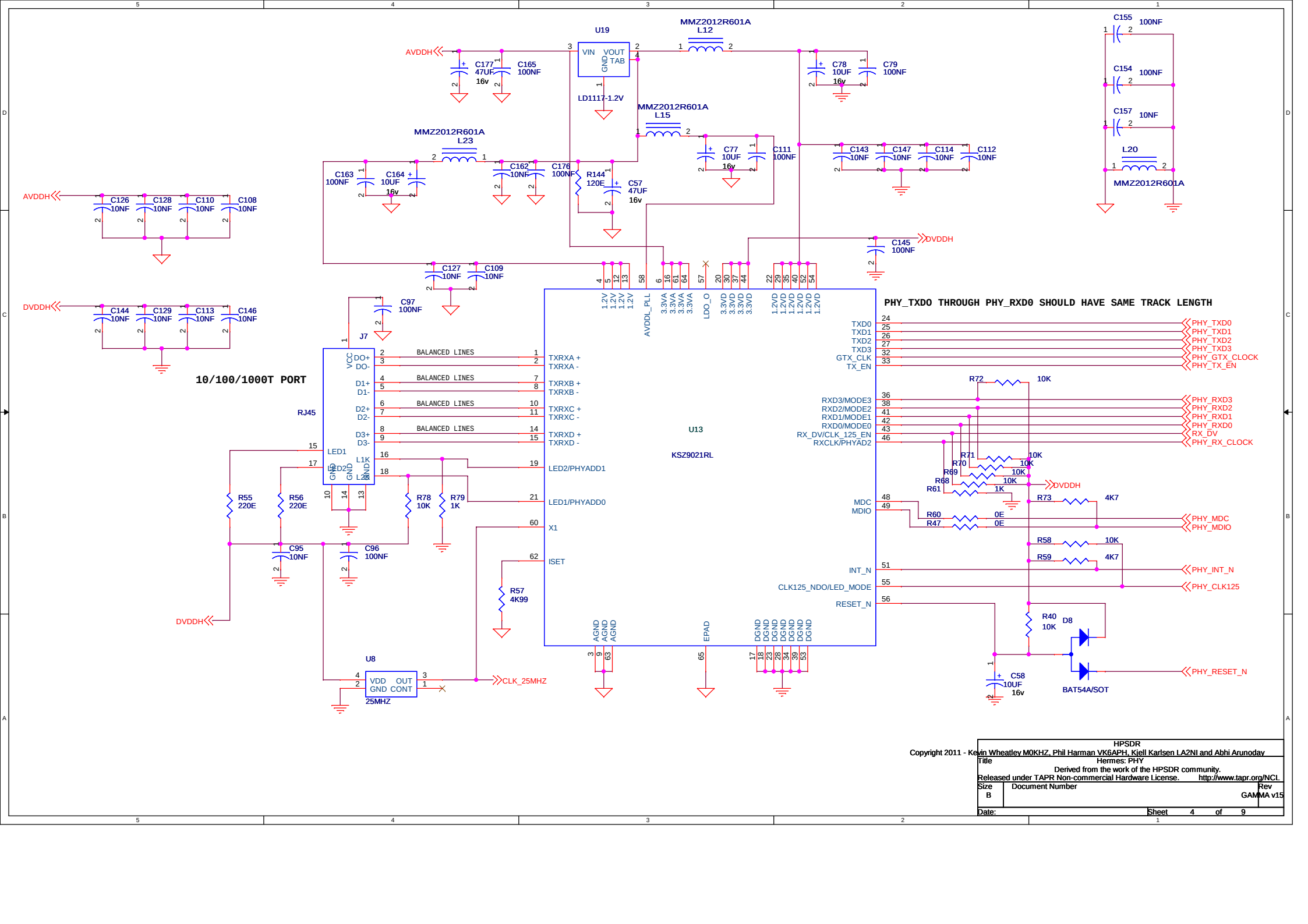
Copyright 2011 - Kevin Wheatley M0KHZ, Phil Harman VK6APH, Kjell Karlsen LA2NI and Abhi Arunoday

	HPSDR	
Title	Hermes: FPGA CONFIG	
	Derived from the work of the HPSDR community.	
	Released under TAPR Non-commercial Hardware License. http://www.tapr.org/NCL	
Size B	Document Number	Rev GAMMA v15
Date:	Sheet 2 of 9	



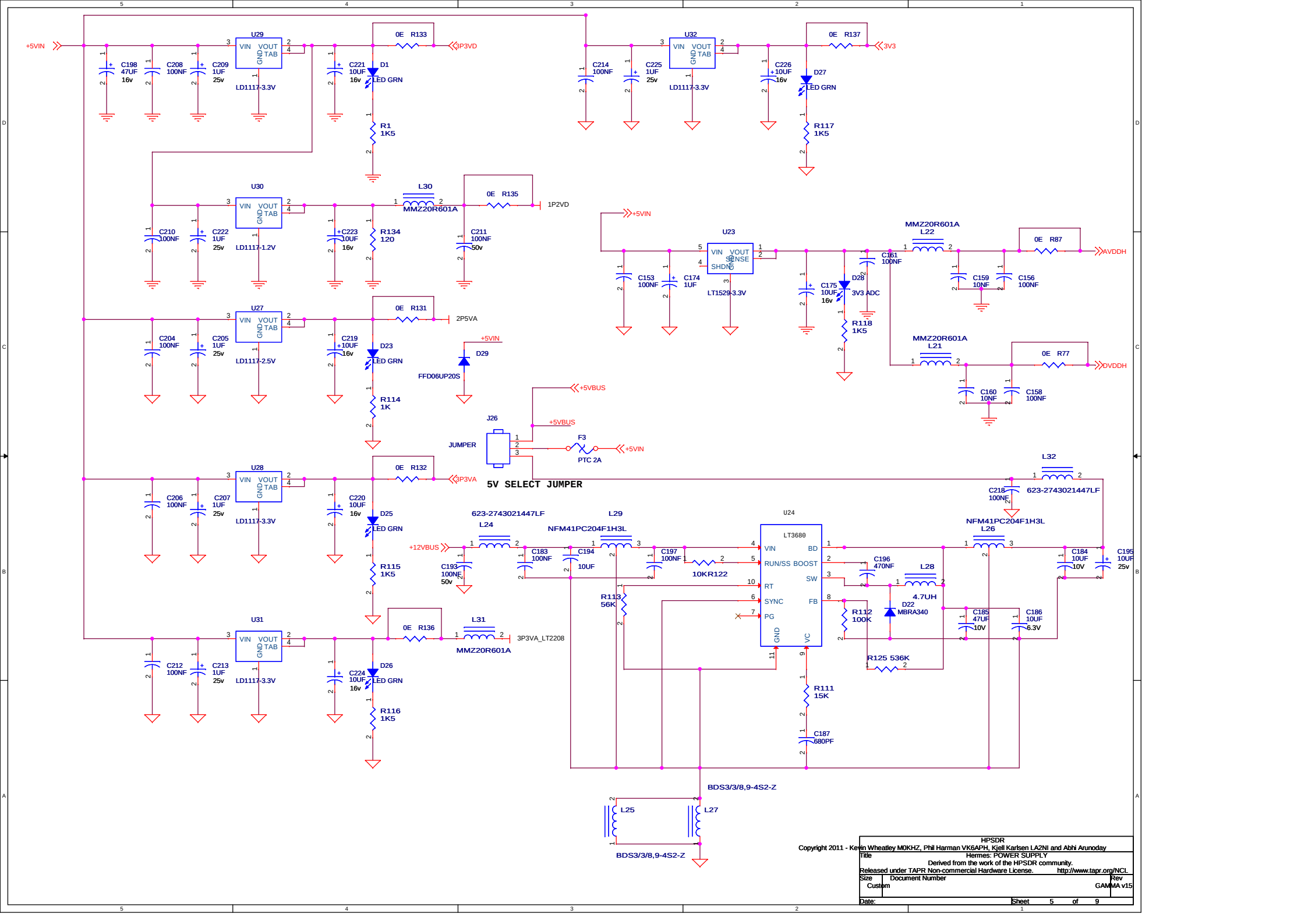
Copyright 2011 - Kevin Wheatley M0KHZ, Phil Harman VK6APH, Kjell Karlsen LA2NI and Abhi Arunoday

HPSDR	
Title	Hermes: FPGA POWER
	Derived from the work of the HPSDR community.
Released under TAPR Non-commercial Hardware License.	http://www.tapr.org/NCL
Size B	Document Number
Rev	GAMMA v15
Date:	Sheet 3 of 9



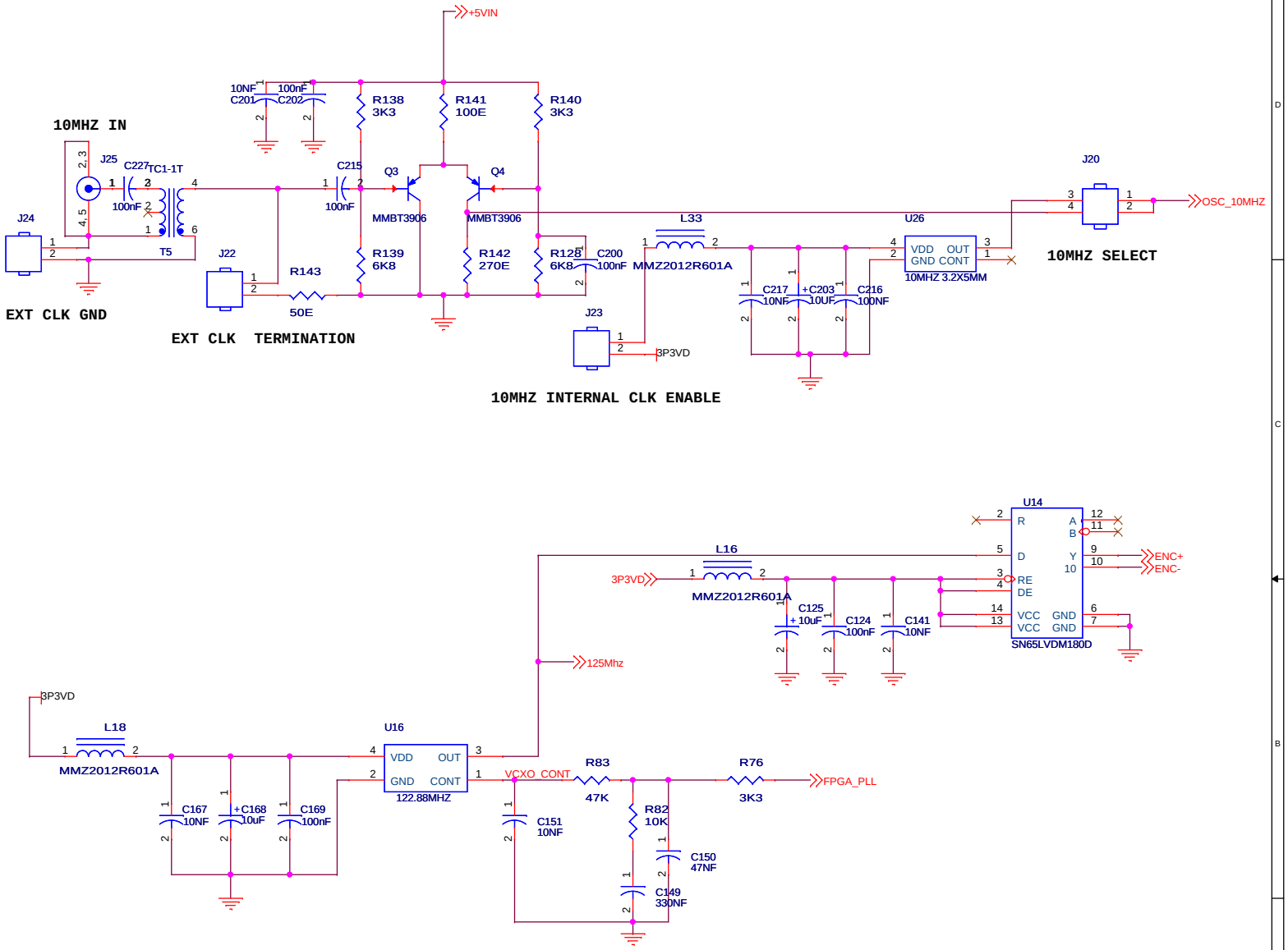
Copyright 2011 - Kevin Wheatley M0KHZ, Phil Harman VK6APH, Kjell Karlsen LA2NI and Abhi Arunoday

HPSDR		
Title	Hermes: PHY	
Derived from the work of the HPSDR community.		
Released under TAPR Non-commercial Hardware License.	http://www.tapr.org/NCL	
Size: B	Document Number	Rev: GAMMA v15
Date:	Sheet 4 of 9	



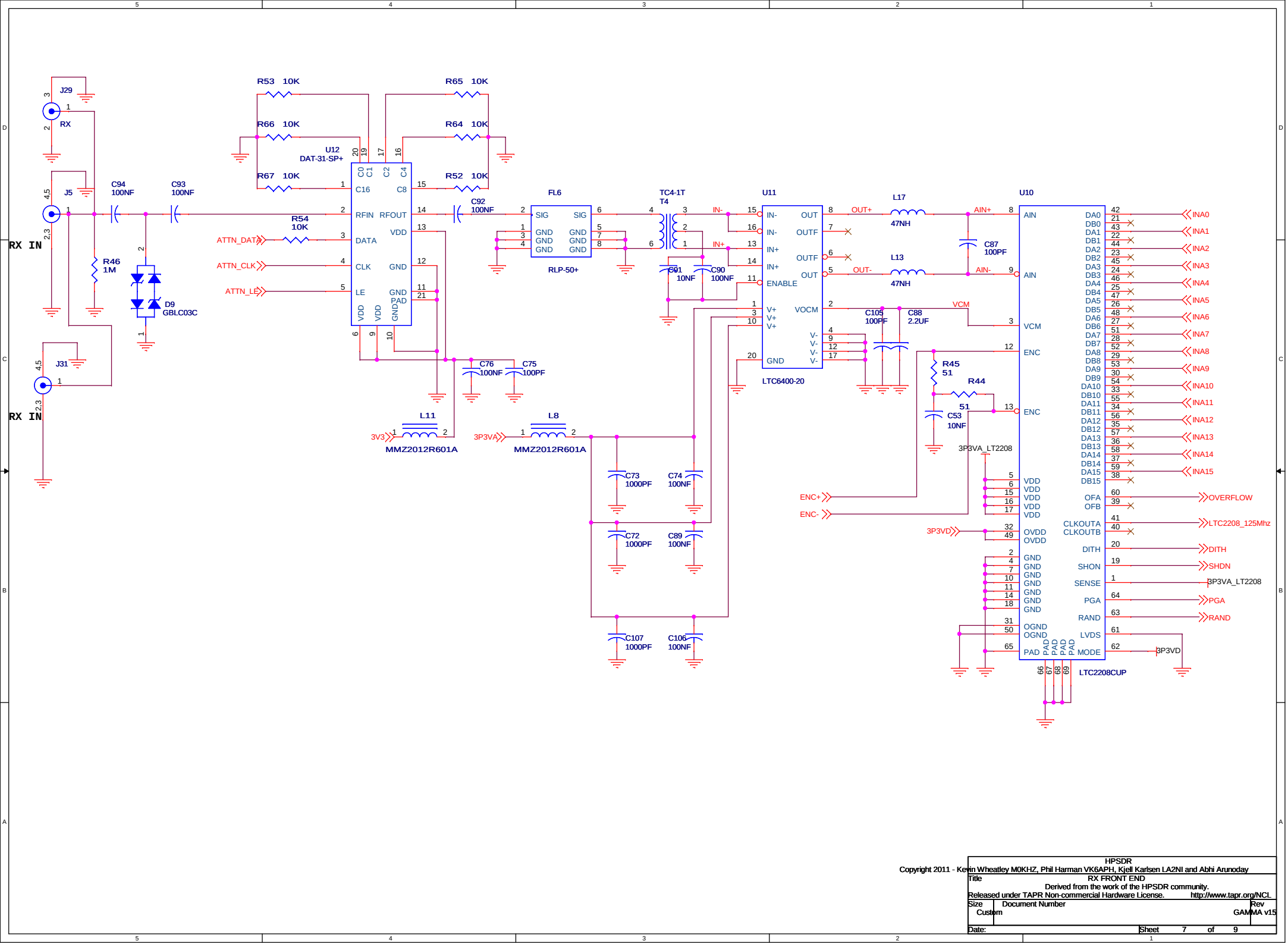
HPSDR
Copyright 2011 - Kevin Wheatley M0KHZ, Phil Harman VK6APH, Kjell Karlsen LA2NI and Abhi Arunoday

Title	Hermes: POWER SUPPLY
	Derived from the work of the HPSDR community.
	Released under TAPR Non-commercial Hardware License. http://www.tapr.org/NCL
Size: Custom	Document Number	Rev: GAMMA v15
Date:	Sheet 5 of 9



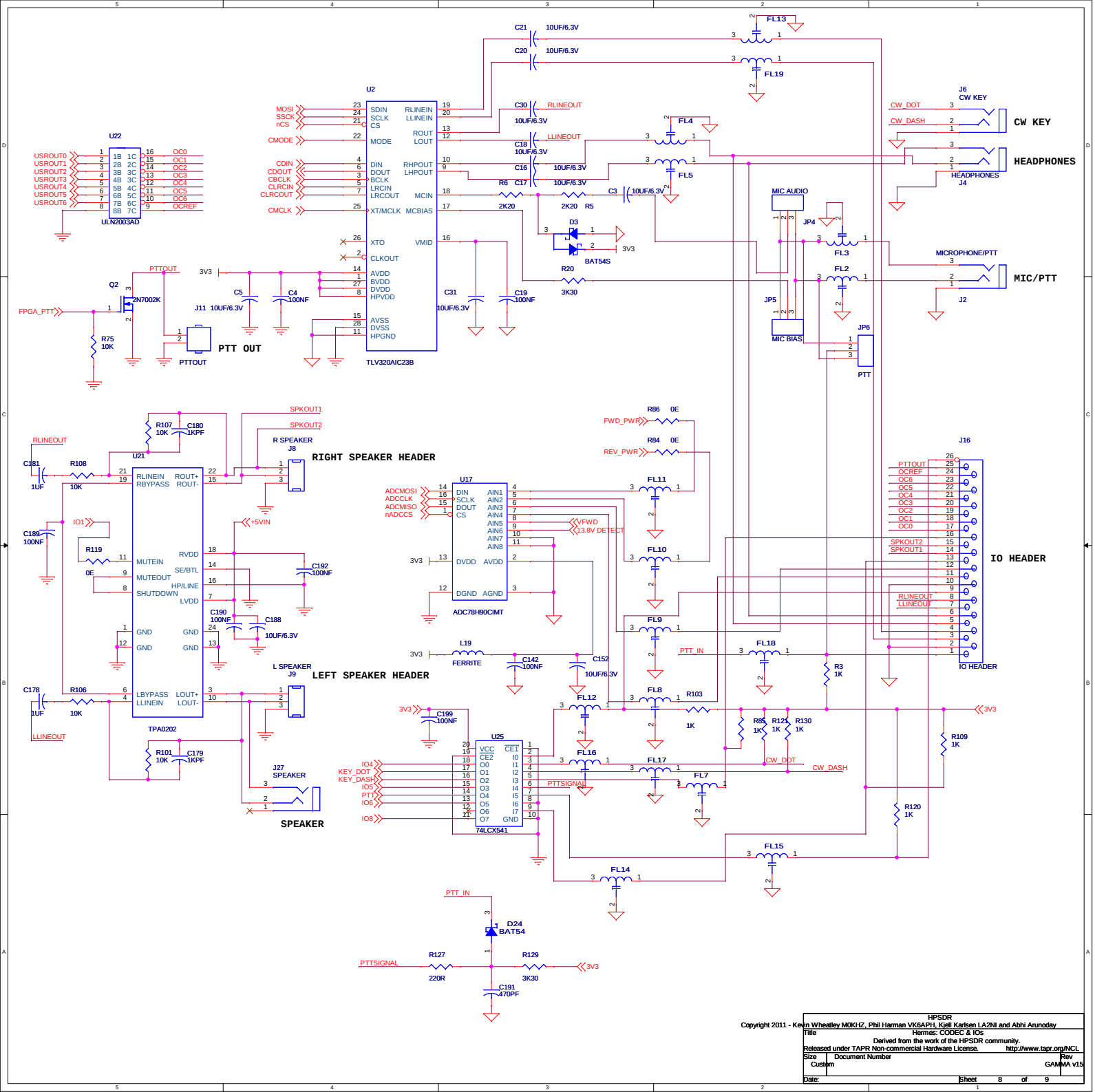
Copyright 2011 - Kevin Wheatley M0KHZ, Phil Harman VK6APH, Kjell Karlsen LA2NI and Abhi Arunoday

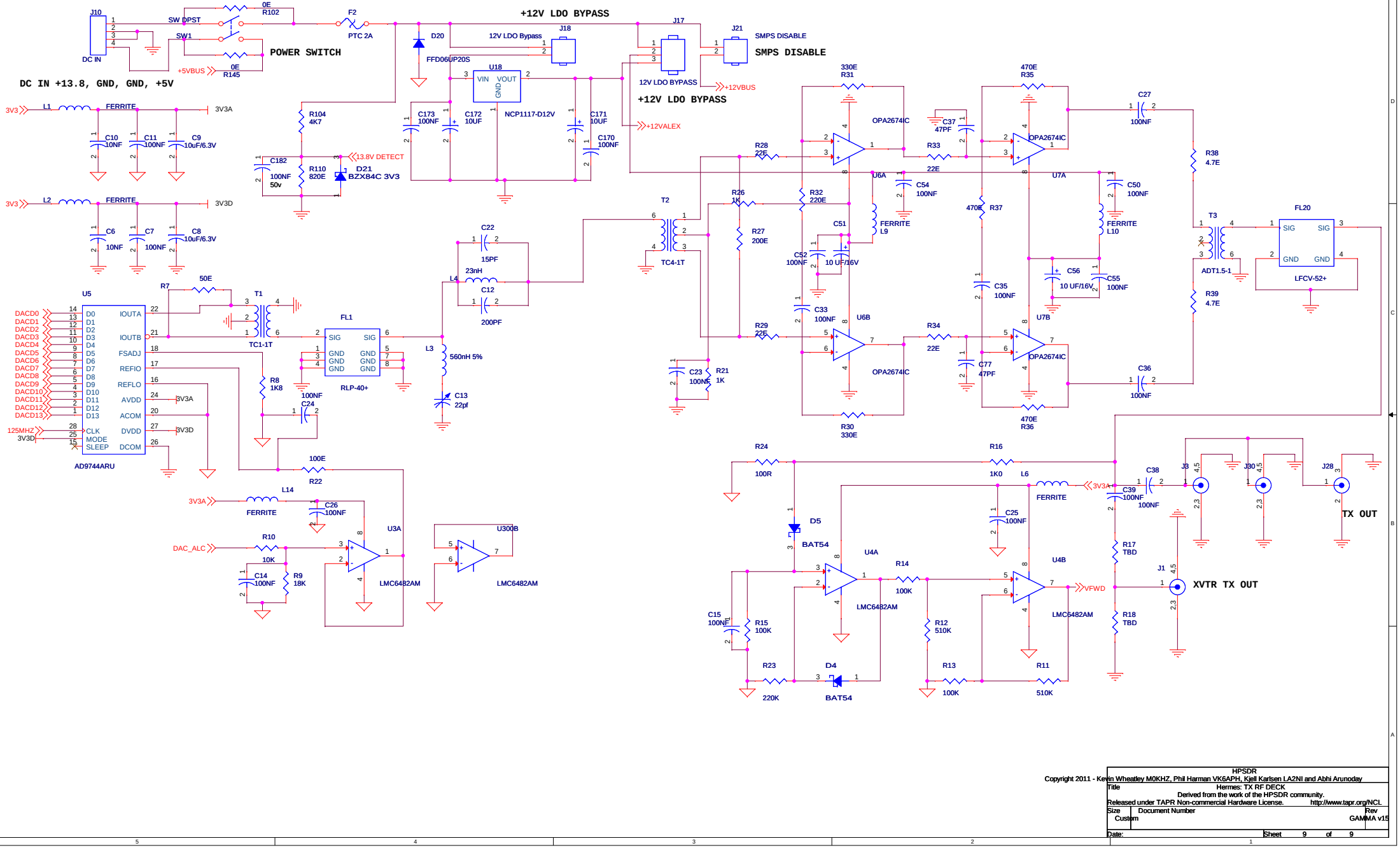
	HPSDR
Title	Hermes: CLOCKS
	Derived from the work of the HPSDR community.
	Released under TAPR Non-commercial Hardware License. http://www.tapr.org/NCL
Size: Custom	Document Number: GAMMA v15
Rev	
Date:	Sheet 6 of 9



Copyright 2011 - Kevin Wheatley M0KHZ, Phil Harman VK6APH, Kjell Karlsen LA2NI and Abhi Arunoday

	HPSDR
Title	RX FRONT END
	Derived from the work of the HPSDR community.
	Released under TAPR Non-commercial Hardware License. http://www.tapr.org/NCL
Size	Custom
Document Number	
Rev	GAMMA v15
Date:	
Sheet	7 of 9


U2
TLV320AIC23B
U22
ULN2003AD
Q2
2N7002K
PTT OUT
PTTOUT
FPGA_PTT
U21
TPA0202
R RIGHT SPEAKER HEADER
L LEFT SPEAKER HEADER
J8
R SPEAKER
J9
L SPEAKER
J27
SPEAKER
U17
ADC78H90CIMT
U25
74LCX541
FERRITE
D3
BAT54S
D24
BAT54
J6
CW KEY
CW KEY
HEADPHONES
HEADPHONES
J4
MIC AUDIO
MICROPHONE/PTT
MIC/PTT
J2
MIC BIAS
JP4
JP5
JP6
PTT
J16
IO HEADER
IO HEADER
FL13
FL19
FL4
FL5
FL3
FL2
FL11
FL10
FL9
FL18
FL8
FL12
FL16
FL17
FL7
FL15
FL14
R3 1K
R109 1K
R120 1K
R85 1K
R121 1K
R130 1K
R103 1K
R75 10K
R107 10K
R108 10K
R106 10K
R101 10K
R119 0E
R86 0E
R84 0E
R20 3K30
R6 2K20
R5 2K20
R127 220R
R129 3K30
C191 470PF
C21 10UF/6.3V
C20 10UF/6.3V
C30 10UF/6.3V
C18 10UF/6.3V
C16 10UF/6.3V
C17 10UF/6.3V
C3 10UF/6.3V
C31 10UF/6.3V
C5 10UF/6.3V
C4 100NF
C19 100NF
C180 1KPF
C179 1KPF
C181 1UF
C178 1UF
C189 100NF
C190 100NF
C192 100NF
C188 10UF/6.3V
C142 100NF
C152 10UF/6.3V
C199 100NF
RLINEOUT
LLINEOUT
SPKOUT1
SPKOUT2
+5VIN
VFWD
13.8V DETECT
FWD_PWR
REV_PWR
PTT_IN
PTTSIGNAL
KEY_DOT
KEY_DASH
CW_DOT
CW_DASH
3V3
USROUT0
USROUT1
USROUT2
USROUT3
USROUT4
USROUT5
USROUT6
OC0
OC1
OC2
OC3
OC4
OC5
OC6
OCREF
MOSI
SSCK
nCS
CMODE
CDIN
CDOUT
CBCLK
CLRCIN
CLRCOUT
CMCLK
ADCMOSI
ADCCLK
ADCMISO
nADCCS
IO1
IO4
IO5
IO6
IO8
PTT
Copyright 2011 - Kevin Wheatley M0KHZ, Phil Harman VK6APH, Kjell Karlsen LA2NI and Abhi Arunoday
HPSDR
Hermes: CODEC & IOs
Derived from the work of the HPSDR community.
Released under TAPR Non-commercial Hardware License.
http://www.tapr.org/NCL
Size Custom
Document Number
Rev GAMMA v15
Date:
Sheet 8 of 9


DC IN +13.8, GND, GND, +5V
POWER SWITCH
+12V LDO BYPASS
SMPS DISABLE
12V LDO BYPASS
+12V LDO BYPASS
NCP1117-D12V
BZX84C 3V3
13.8V DETECT
FFD06UP20S
PTC 2A
SW DPST
+5VBUS
+12VBUS
+12VALEX
OPA2674IC
AD9744ARU
TC4-1T
TC1-1T
ADT1.5-1
LFCV-52+
RLP-40+
LMC6482AM
BAT54
FERRITE
TX OUT
XVTR TX OUT
VFWD
125MHZ
DAC_ALC
3V3A
3V3D
HPSDR
Copyright 2011 - Kevin Wheatley M0KHZ, Phil Harman VK6APH, Kjell Karlsen LA2NI and Abhi Arunoday
Hermes: TX RF DECK
Derived from the work of the HPSDR community.
Released under TAPR Non-commercial Hardware License.
http://www.tapr.org/NCL
Custom
GAMMA v15
Sheet 9 of 9