



NW Digital Radio

UDRC™ Universal Digital Radio Controller

Features:

- Raspberry Pi HAT Compliant
 - 40 Pin Header
- 12V to 5V 3AMP Voltage Regulator
- TI 3204 DSP Sound Chip
- PTT and COR Interface
- DE-15 Pin Connector
 - Interface to Yaesu DR1-X Repeater
- Mini DIN-6 Connector
 - HF/VHF/UHF Radio Data Port
- Open Source Image Available

Open Source Applications

Supported by Others:

- ircddbgateway/Dummyrepeater
- DIREWOLF 1200/9600 AX25
- FL-Digi
- ISO Image available for Download

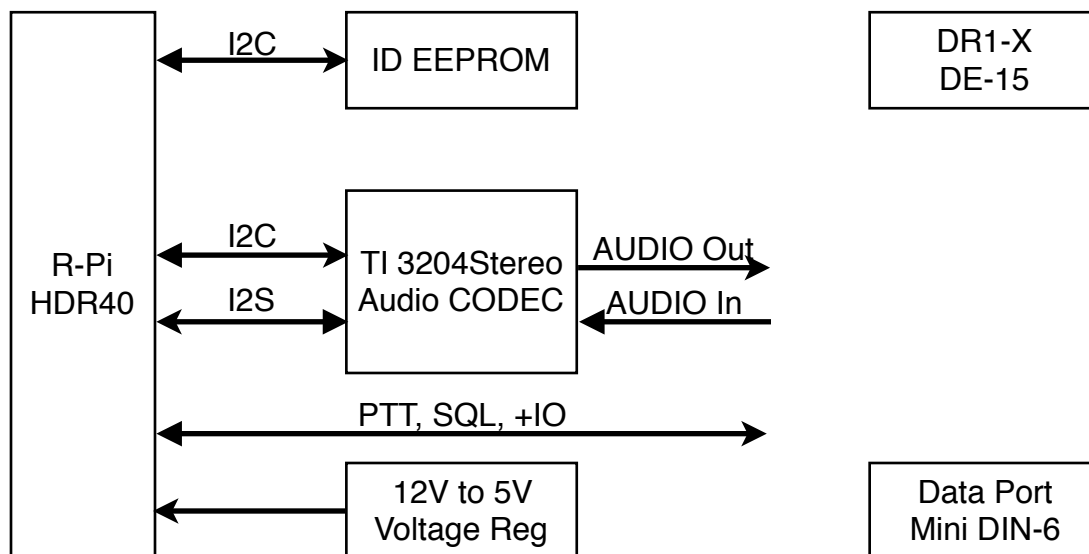
Check the [website](#) for availability

The UDRC™ is a Raspberry Pi HAT containing all of the necessary hardware to directly interface to a radio or repeater.

The UDRC™ is compliant with Raspberry Pi HAT Specification and has the ID EEPROM which directly loads the device table for the UDRC on boot up. The Ideal Diode circuit allows the Pi to be powered by either the Micro USB jack or external 12VDC.

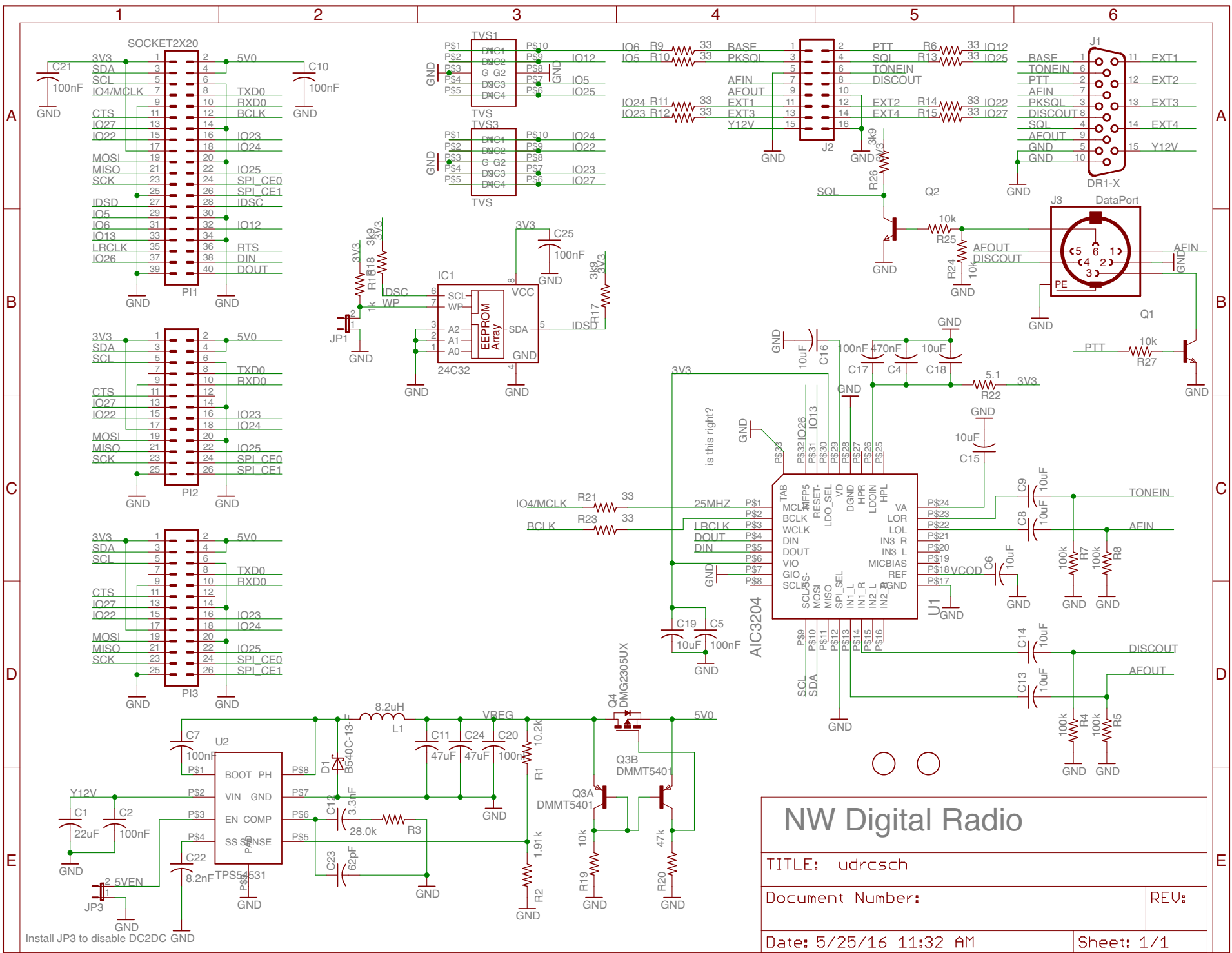
Direct Connection to the Yaesu DR1-X Repeater is available with the DE-15 Cable and adds D-STAR Capability to your Fusion Repeater.

Alternatively the Mini DIN-6 Cable can be used to connect to the Data Port on a standard HF/VHF/UHF Radio.



Pinout

UDRC	REV 3					
Function	HDR 40	PI	DE15/HDR16	3.3V Only	Mini DIN-6	
BASE	31	IO6	1	Output		
PTT	32	IO12	2	Output	3	Open Collector on DIN-6
PKSQL	29	IO5	3	Output		
SQLDET	22	IO25	4	Input	6	12 V Tolerant may require Pullup
GND			5	Power	2	
TONEIN		Line Out Right	6	Output		10 uF DC Blocking Cap
AFIN		Line Out Left	7	Output	1	10 uF DC Blocking Cap
DISCOUT		Line In 1 Right	8	Input	4	10 uF DC Blocking Cap
AFOUT		Line In 1 Left	9	Input	5	10 uF DC Blocking Cap
GND			10	Power		
EXT1	18	IO24	11	Output		
EXT2	15	IO22	12	Output		
EXT3	16	IO23	13	Output		
EXT4	13	IO27	14	Output		
12VDC			15	Power		
GND			16	Power		



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