



NW Digital Radio

DV3000 Digital Vocoder Card for the UDRX or Raspberry Pi

Features:

- DVSI [AMBE3000](#) Chip
- 26 Pin Stackable Header
 - UDRX
 - Raspberry Pi
- UART Packet Interface
 - 230.4 kbaud
- Expansion Port w 4 GPIO
- Serial Test Software included

Open Source Applications:

- ircddbgateway/repeater
- dvtool file converter
 - Bi-directional analog to AMBE
- UDRX Support for D-STAR DV

Check the [website](#) for availability

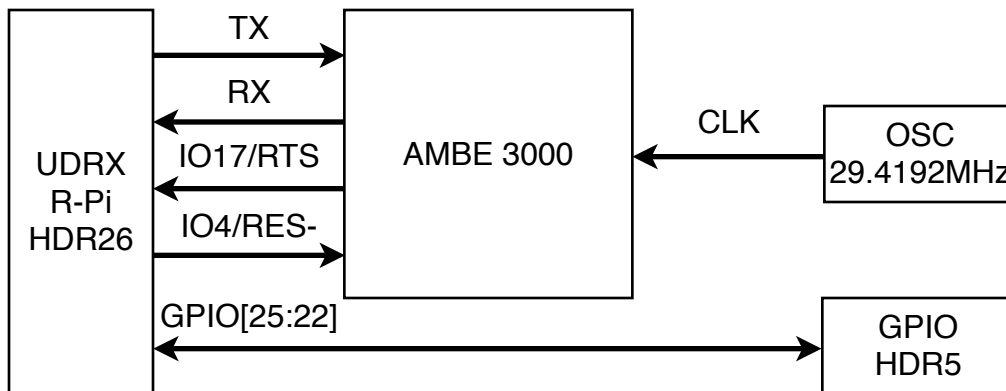
AMBE Vocoder For:

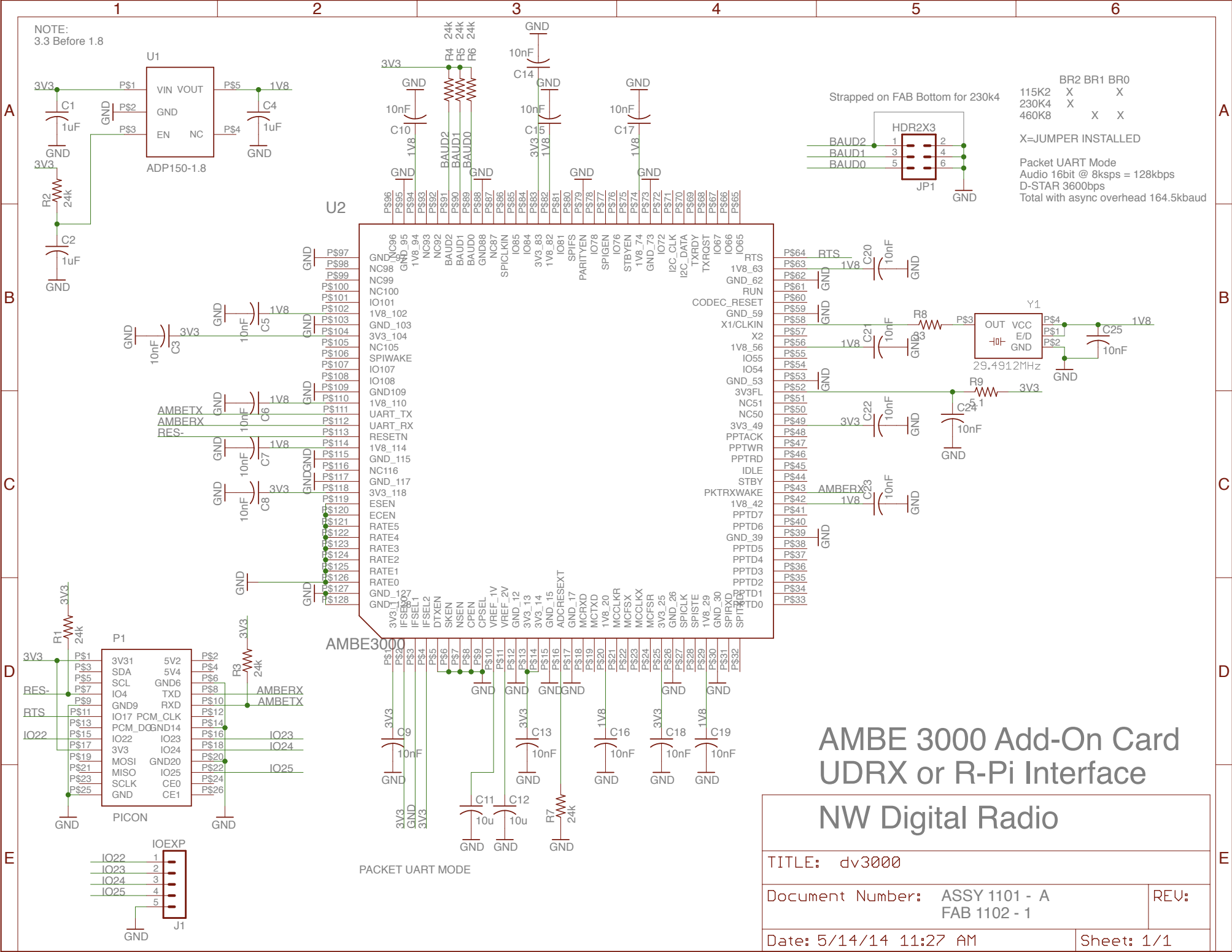
- D-STAR
- DMR*
- dPMR*
- Yaesu Fusion

The DV3000 adds D-STAR DV capability to your UDRX or R-Pi. The DV3000 is sold as a tested PCA with applications software offered by others.

The DV3000 provides a Packet UART interface at 230.4 kbaud. Audio Data is sent as 16 bits pcm at 8kHz sampling rate. The AMBE Vocoder returns a 3600 bps compressed stream with FEC (Forward Error Correction) which is muxed with 1200 bps of ancillary digital data by the D-STAR protocol to produce a 4800 bps D-STAR DV stream.

By using the UART for both Audio and compressed data, the Pi's SPI, I2C and PCM pins are available for other functions. GPIO Pins 22-25 are routed to pads for uses such as PTT or COR (external signal conditioning may be necessary).





NOTE:
3.3 Before 1.8

	BR2	BR1	BR0
115K2	X		X
230K4	X		
460K8		X	X

X=JUMPER INSTALLED

Packet UART Mode
Audio 16bit @ 8ksps = 128kbps
D-STAR 3600bps
Total with async overhead 164.5kbaud

AMBE 3000 Add-On Card UDRX or R-Pi Interface

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