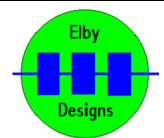
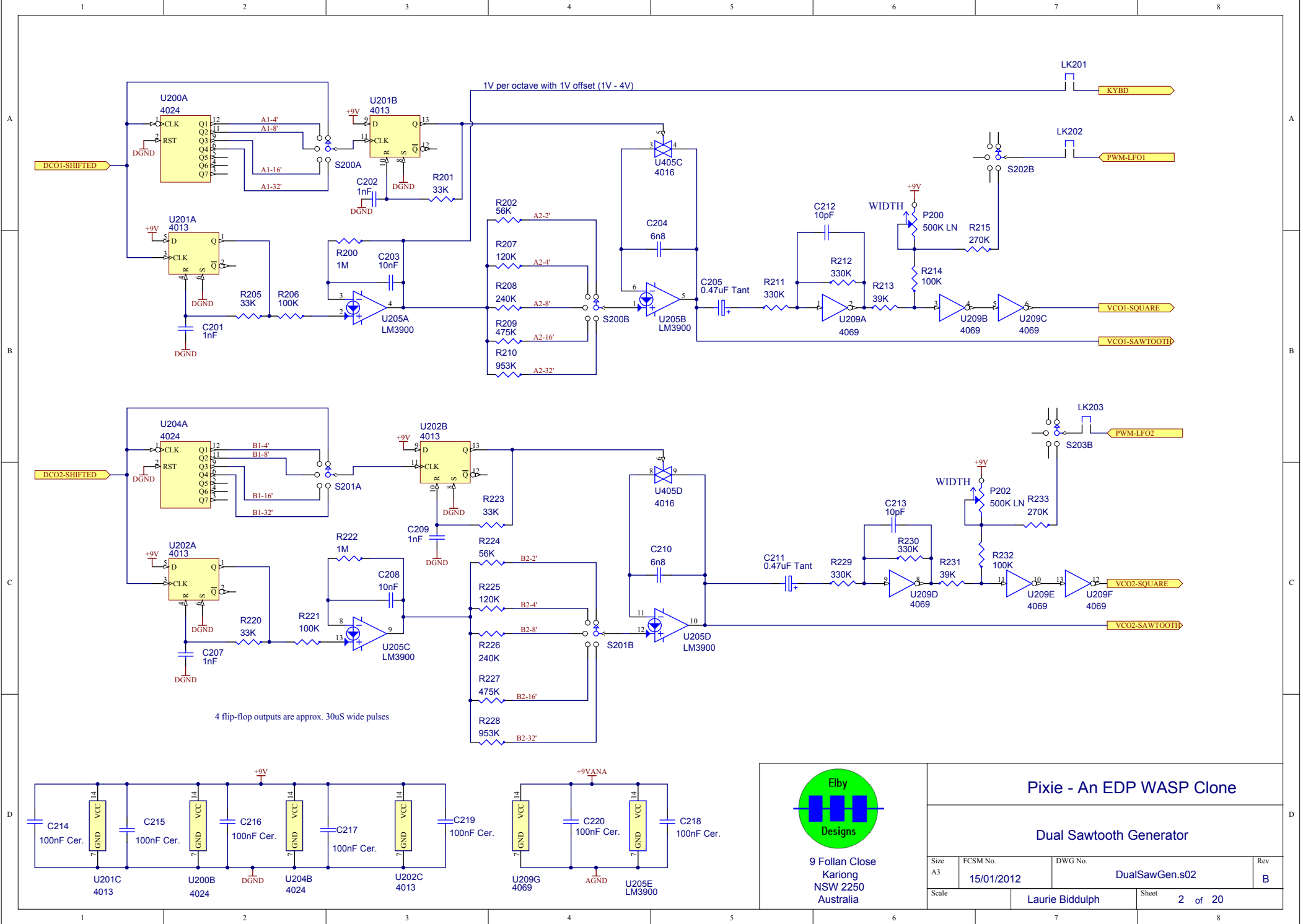


Cannot open file elby.jpg			
Size A3	FCSM No.	DWG No.	Rev
Scale			Sheet



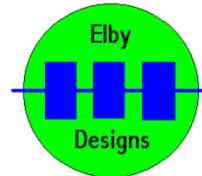
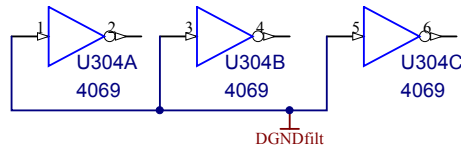
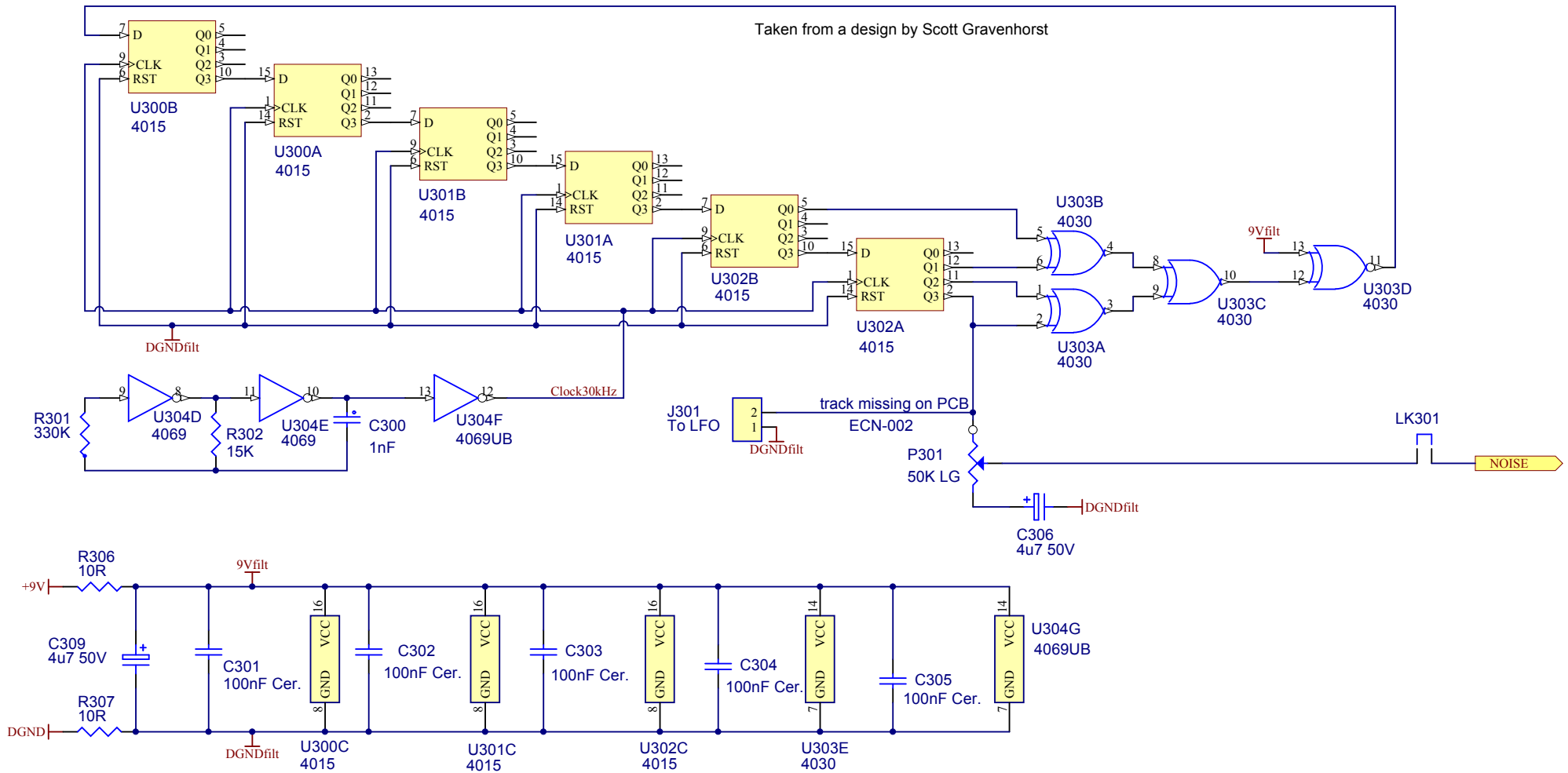
9 Follan Close
Karing
NSW 2250
Australia

Pixie - An EDP WASP Clone

Dual Sawtooth Generator

Size A3	FCSM No. 15/01/2012	DWG No. DualSawGen.s02	Rev B
Scale	Laurie Biddulph	Sheet 2 of 20	

Taken from a design by Scott Gravenhorst



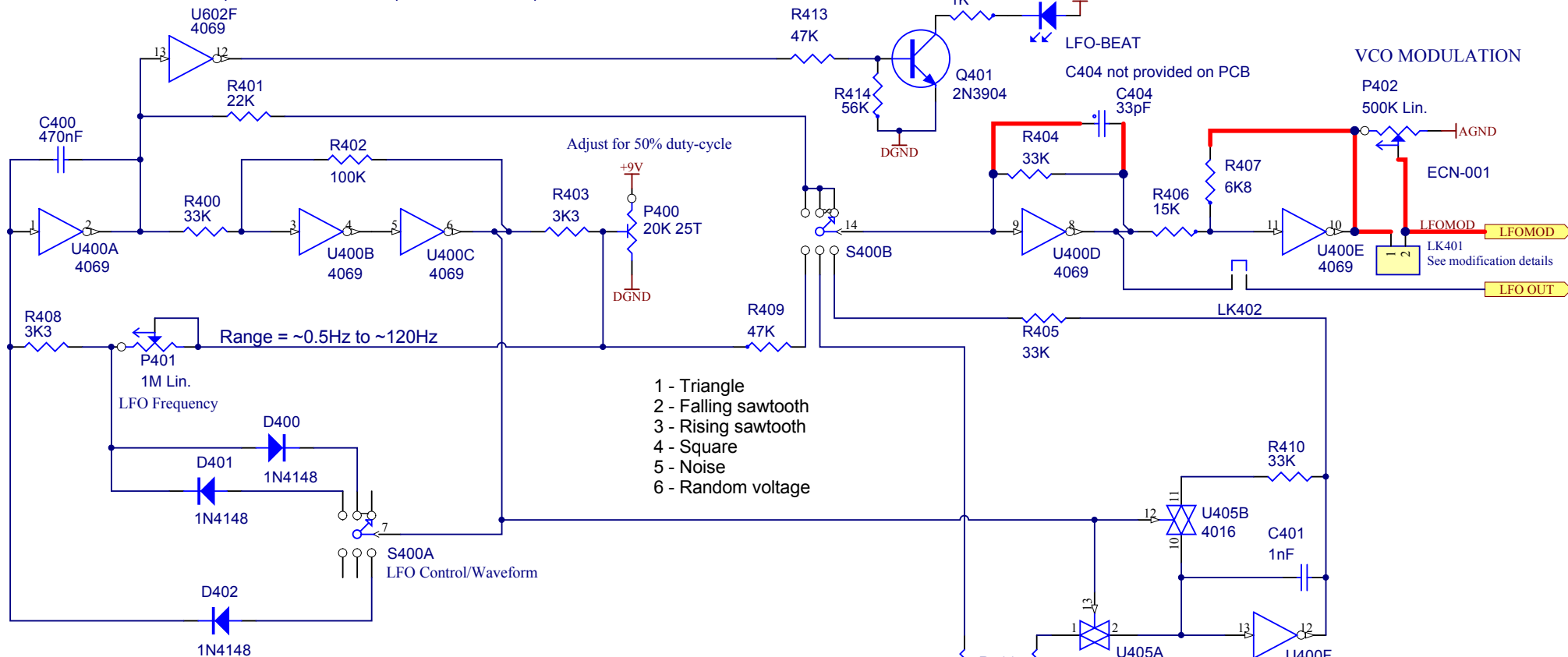
9 Follan Close
Kariang
NSW 2250
Australia

Pixie - An EDP Wasp Clone

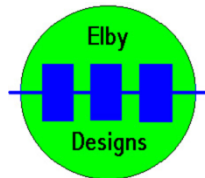
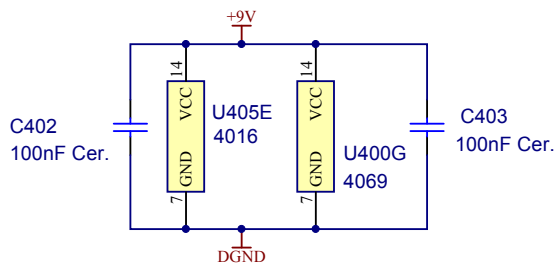
24-bit Noise Module

Size A4	FCSM No. 15/01/2012	DWG No. Noise.s03	Rev 2
Scale	Laurie Biddulph		Sheet 3 of 20

ECN-004 Remove pin 12 from IC and short pins 12 & 13 on the pcb



J401
From NOISE

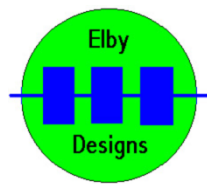
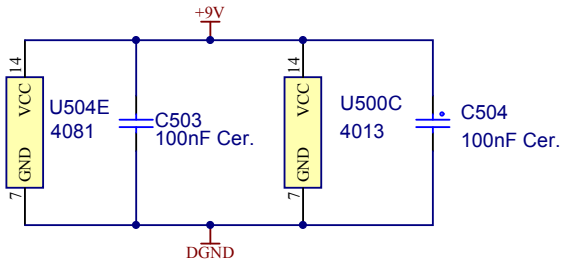
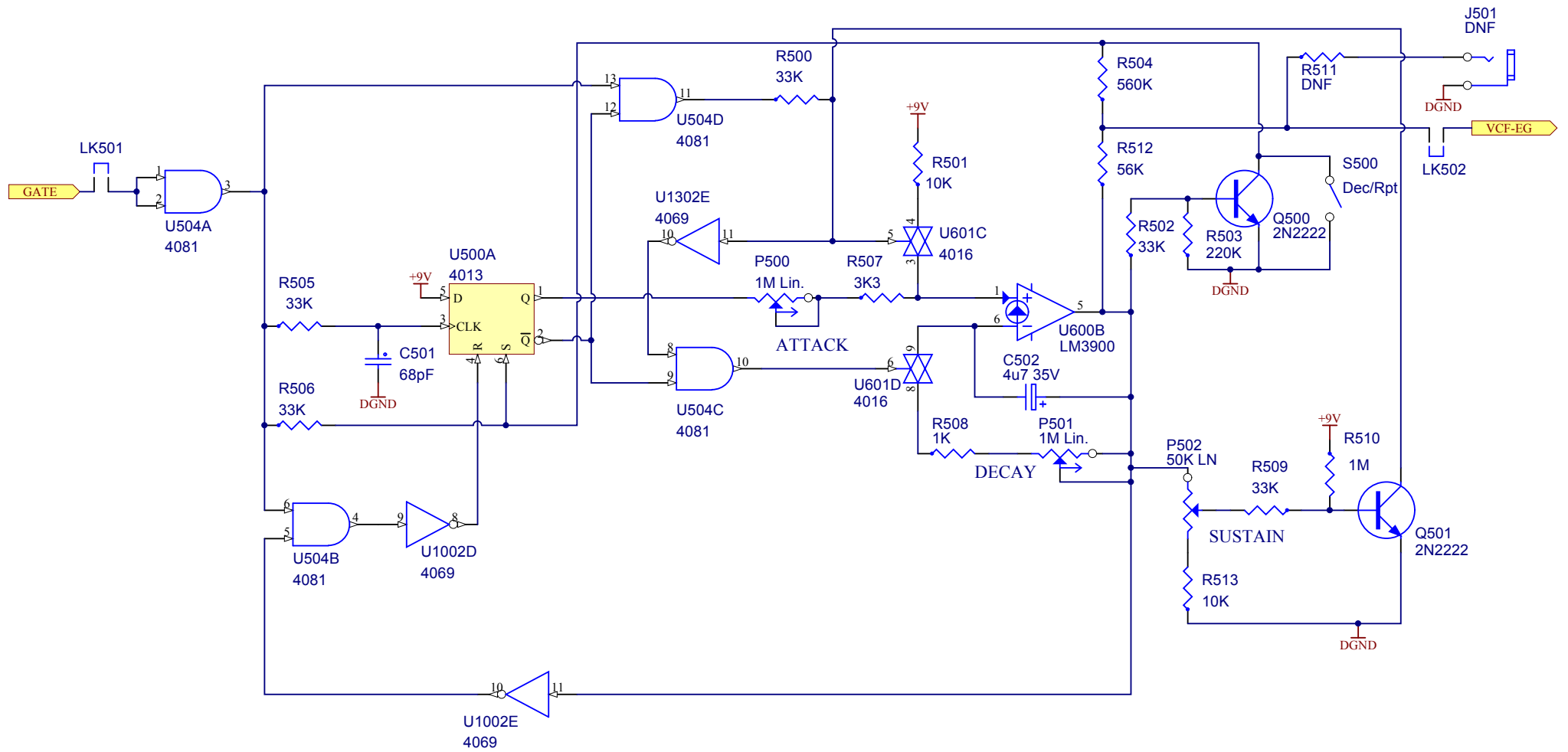


9 Follan Close
Karing
NSW 2250
Australia

Pixie - An EDP Wasp Clone

Low Frequency Oscillator (LFO)

Size A4	FCSM No. 15/01/2012	DWG No. Lfo.s04	Rev 3
Scale	Laurie Biddulph		Sheet 4 of 20

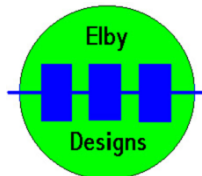
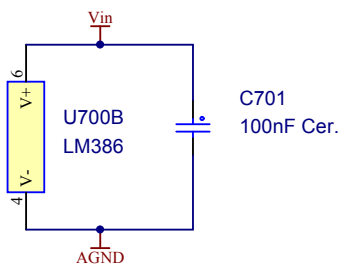
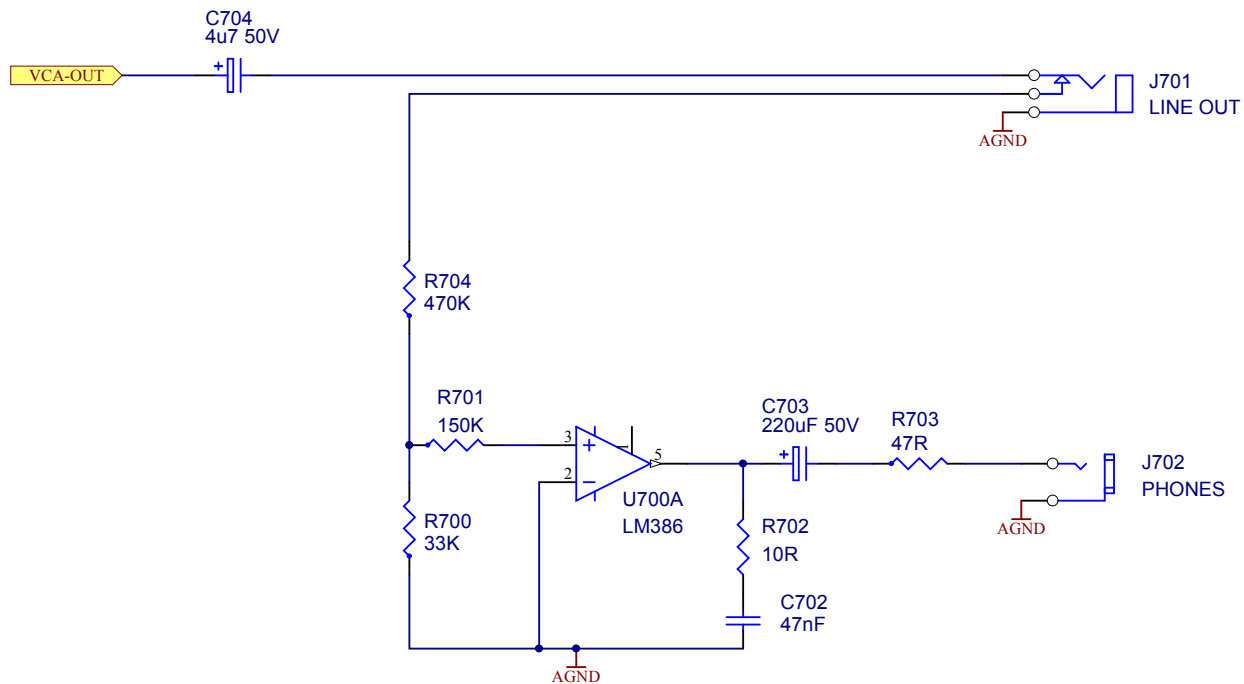


9 Follan Close
Kariang
NSW 2250
Australia

Pixie - An EDP WASP Clone

Envelope Generator for VCF

Size A4	FCSM No. 15/01/2012	DWG No. VCF-EG.s05	Rev 1
Scale	Laurie Biddulph		Sheet 5 of 21

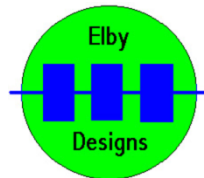
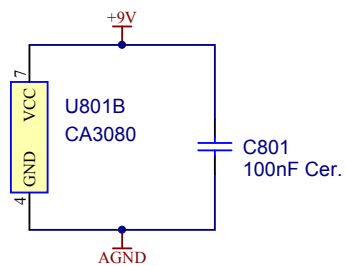
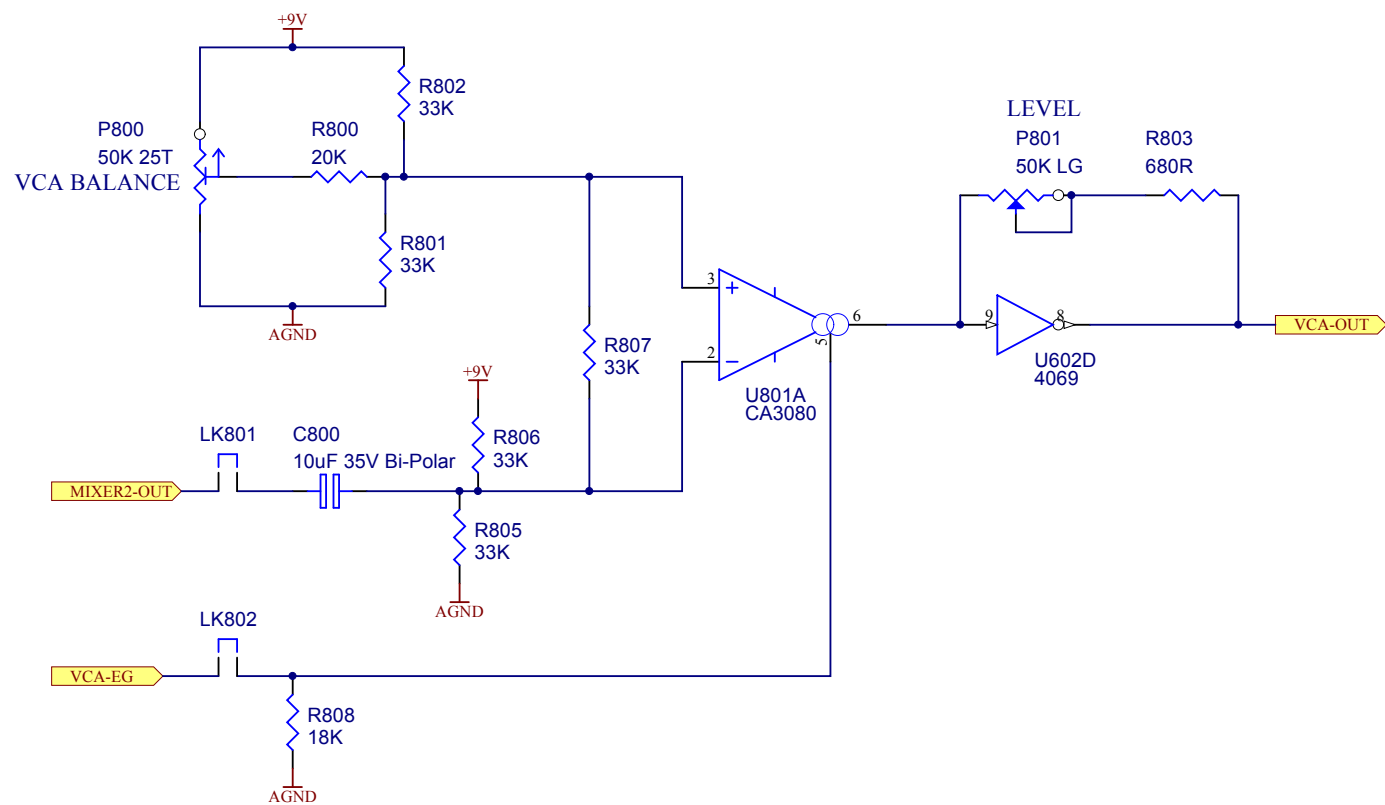


9 Follan Close
Kariang
NSW 2250
Australia

Pixie - An EDP WASP Clone

Audio Output

Size A4	FCSM No. 15/01/2012	DWG No. Audio.s07	Rev B
Scale	Laurie Biddulph	Sheet 7 of 20	

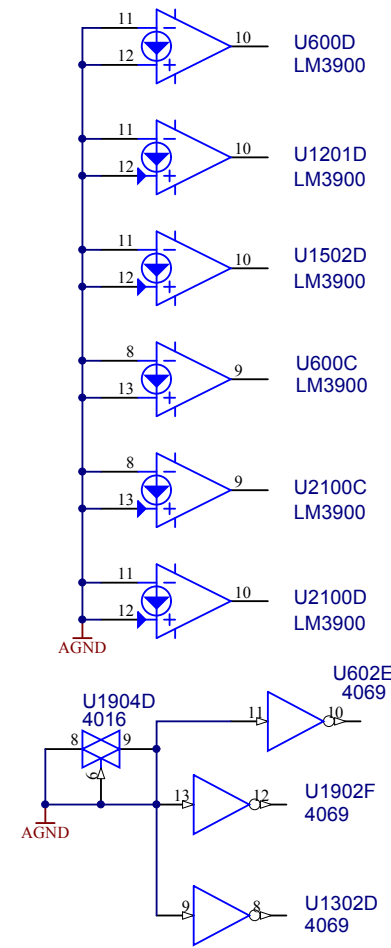
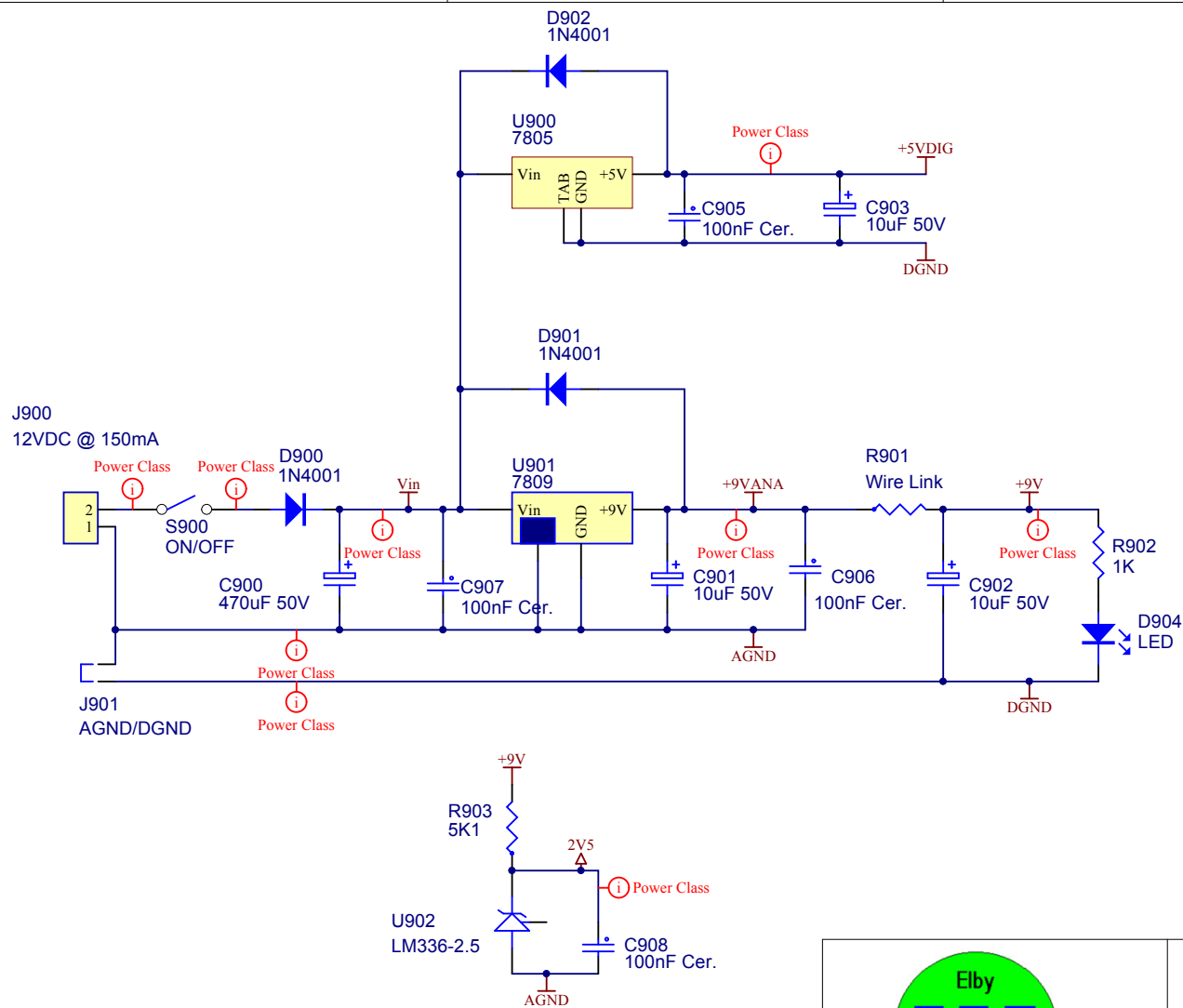


9 Follan Close
Karing
NSW 2250
Australia

Pixie - An EDP WASP Clone

Voltage Controlled Amplifier

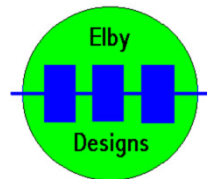
Size A4	FCSM No. 15/01/2012	DWG No. VCA.s08	Rev B
Scale	Laurie Biddulph		Sheet 8 of 20



U900 Hardware
 ⊕ M3 x 8mm Bolt
 ⊙ M3 Locknut
 20C/W Heatsink Vert 6073B

U901 Hardware
 ⊕ M3 x 8mm Bolt
 ⊙ M3 Locknut
 20C/W Heatsink Vert 6073B

PCB Fixing Points
 □ □ □ □

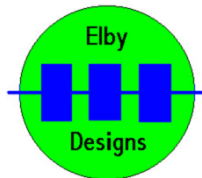
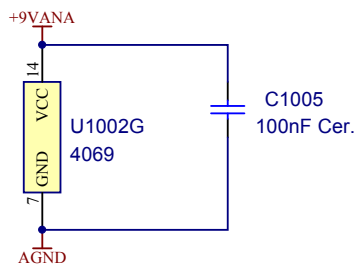
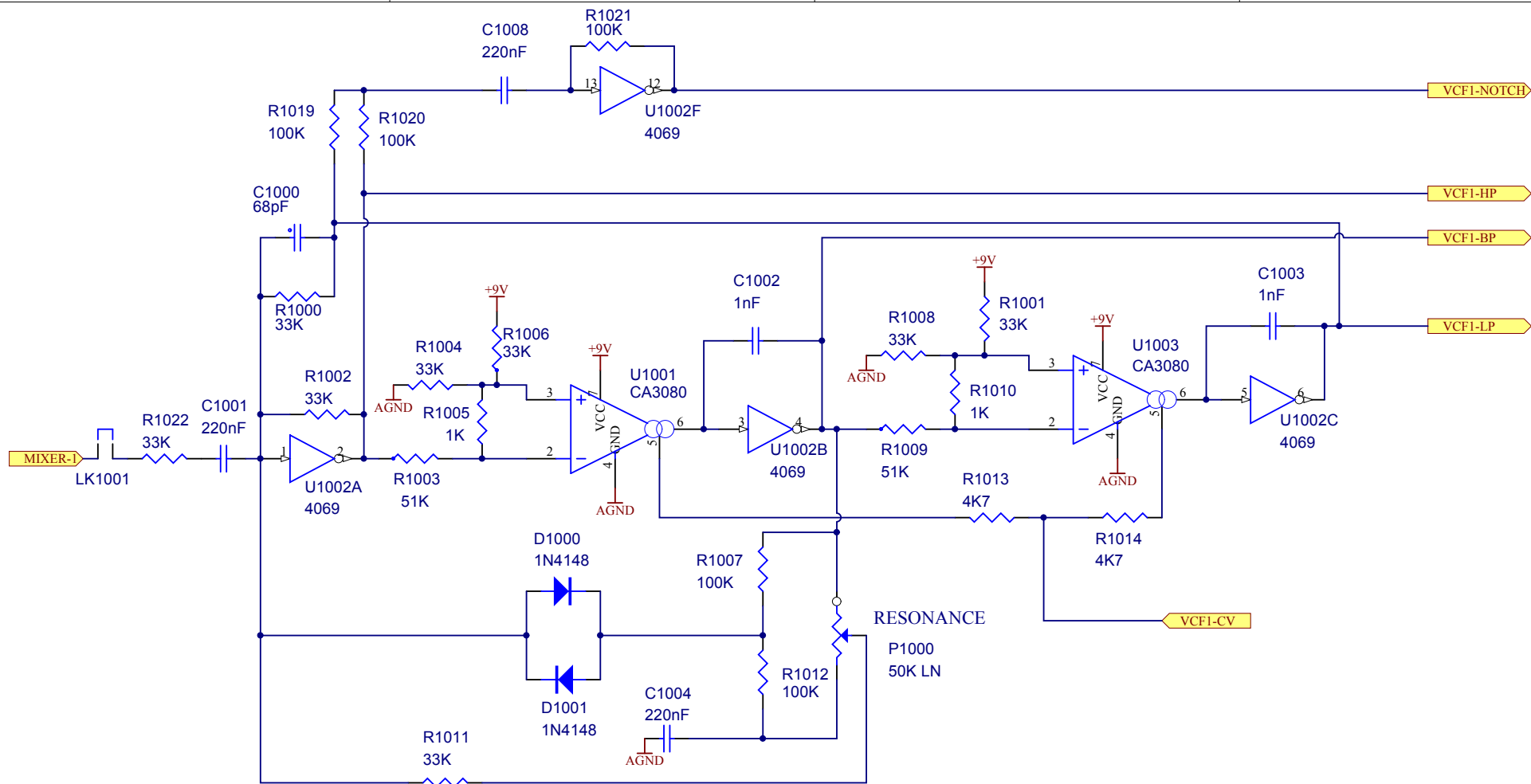


9 Follan Close
 Kariong
 NSW 2250
 Australia

Pixie - An EDP WASP Clone

Power Supply

Size A4	FCSM No. 15/01/2012	DWG No. PSU.s09	Rev C
Scale	Laurie Biddulph		Sheet 9 of 20

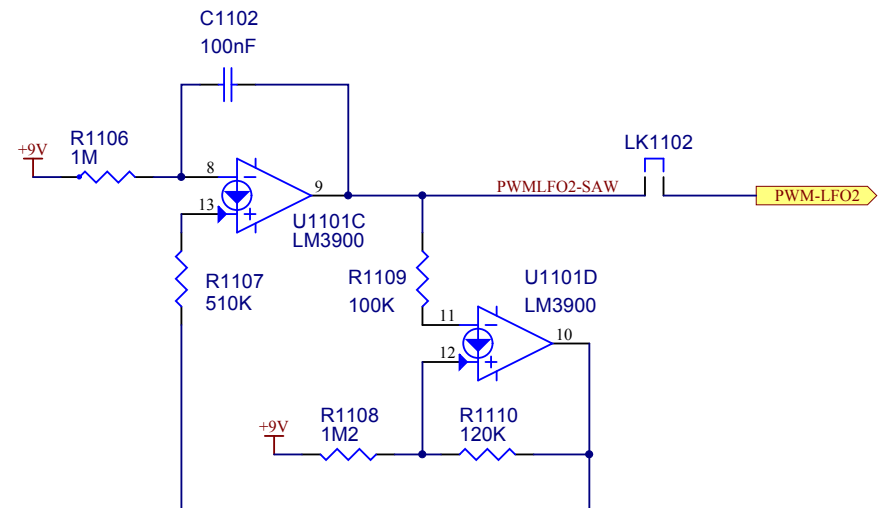
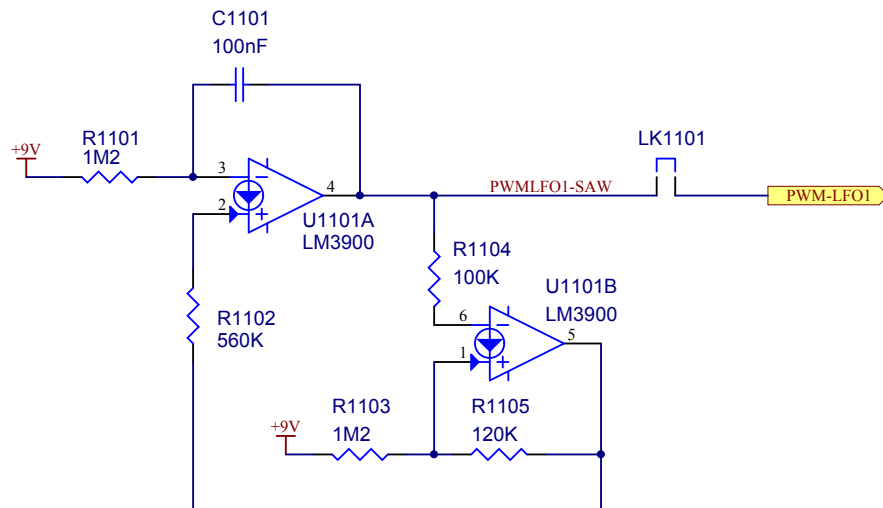


9 Follan Close
Kariong
NSW 2250
Australia

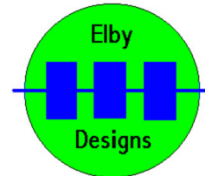
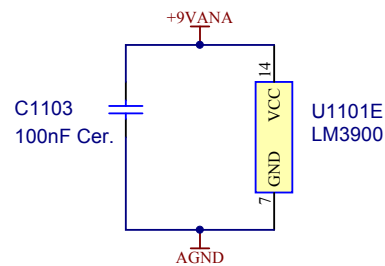
Pixie - An EDP WASP Clone

Voltage Controlled Filter - VCF1

Size A4	FCSM No. 15/01/2012	DWG No. Filter1.s10	Rev A
Scale	Laurie Biddulph		Sheet 10 of 20



Adjust the values of R1102 and R1107 to give preferred modulation frequency.
They should be different values to provide a small beat frequency.
For optimum symmetry, $R1101 = 2 \times R1102$ and $R1106 = 2 \times R1107$
Current values gives 50Hz and 55Hz

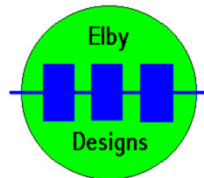
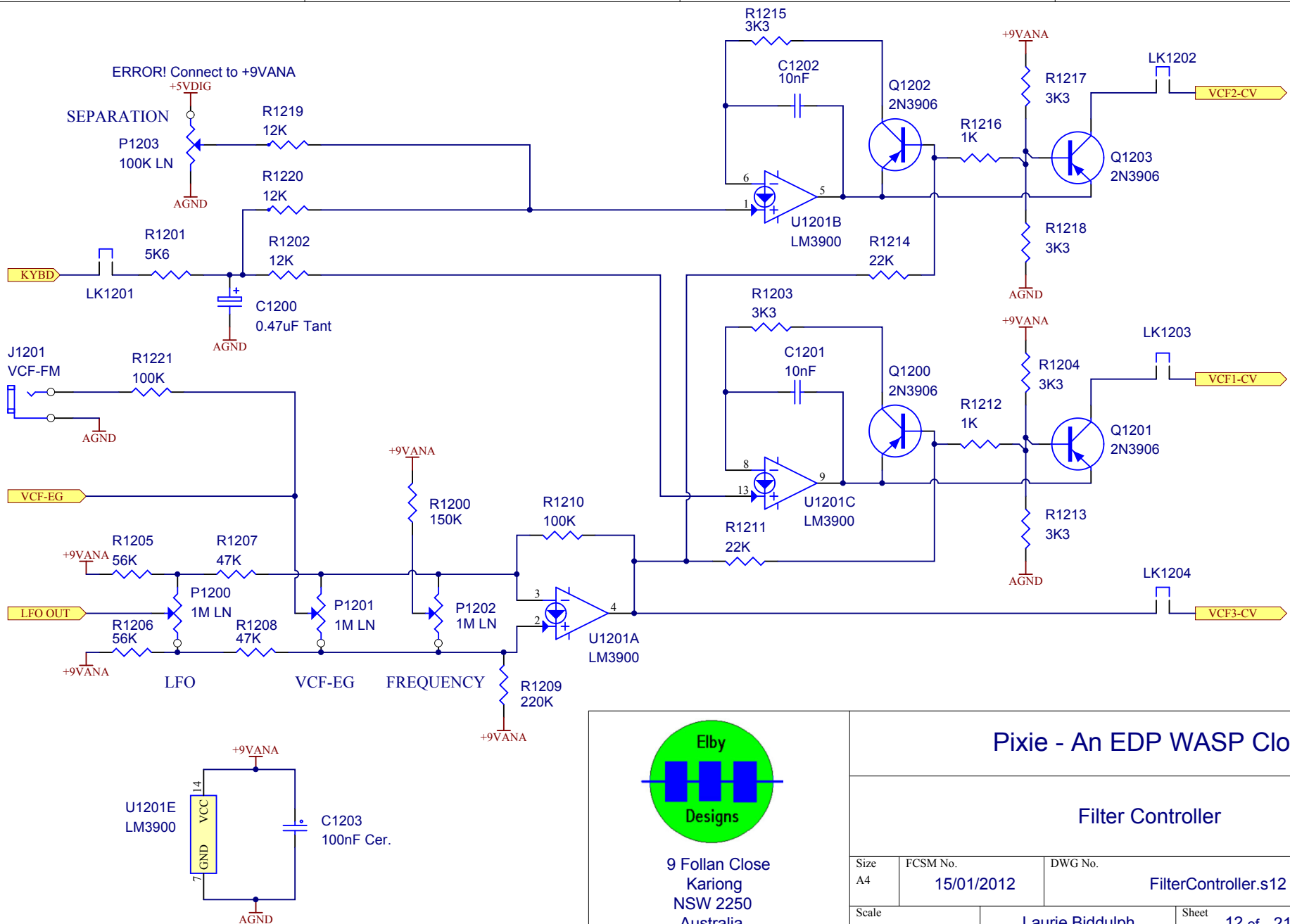


9 Follan Close
Kariong
NSW 2250
Australia

Pixie - An EDP WASP Clone

Dual PWM LFO

Size A4	FCSM No. 15/01/2012	DWG No. PWM-LFO.s11	Rev B
Scale	Laurie Biddulph		Sheet 11 of 20

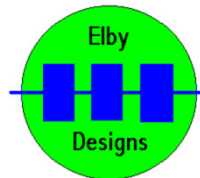
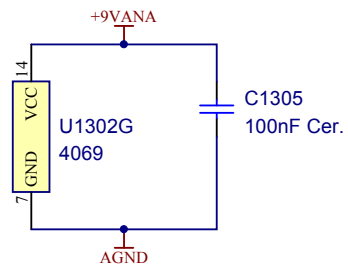
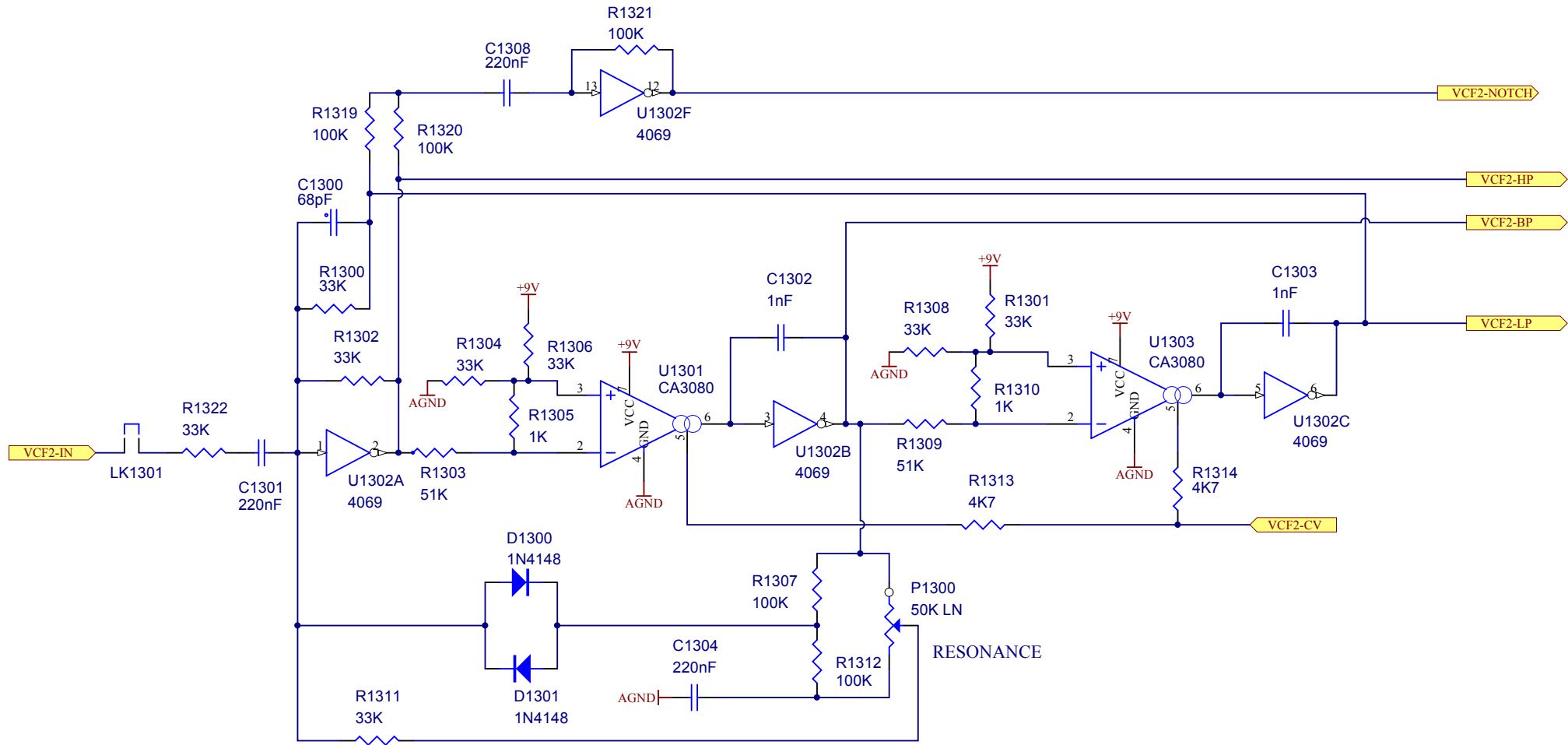


9 Follan Close
Kariong
NSW 2250
Australia

Pixie - An EDP WASP Clone

Filter Controller

Size A4	FCSM No. 15/01/2012	DWG No. FilterController.s12	Rev 1
Scale	Laurie Biddulph		Sheet 12 of 21

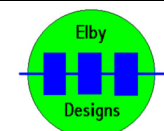
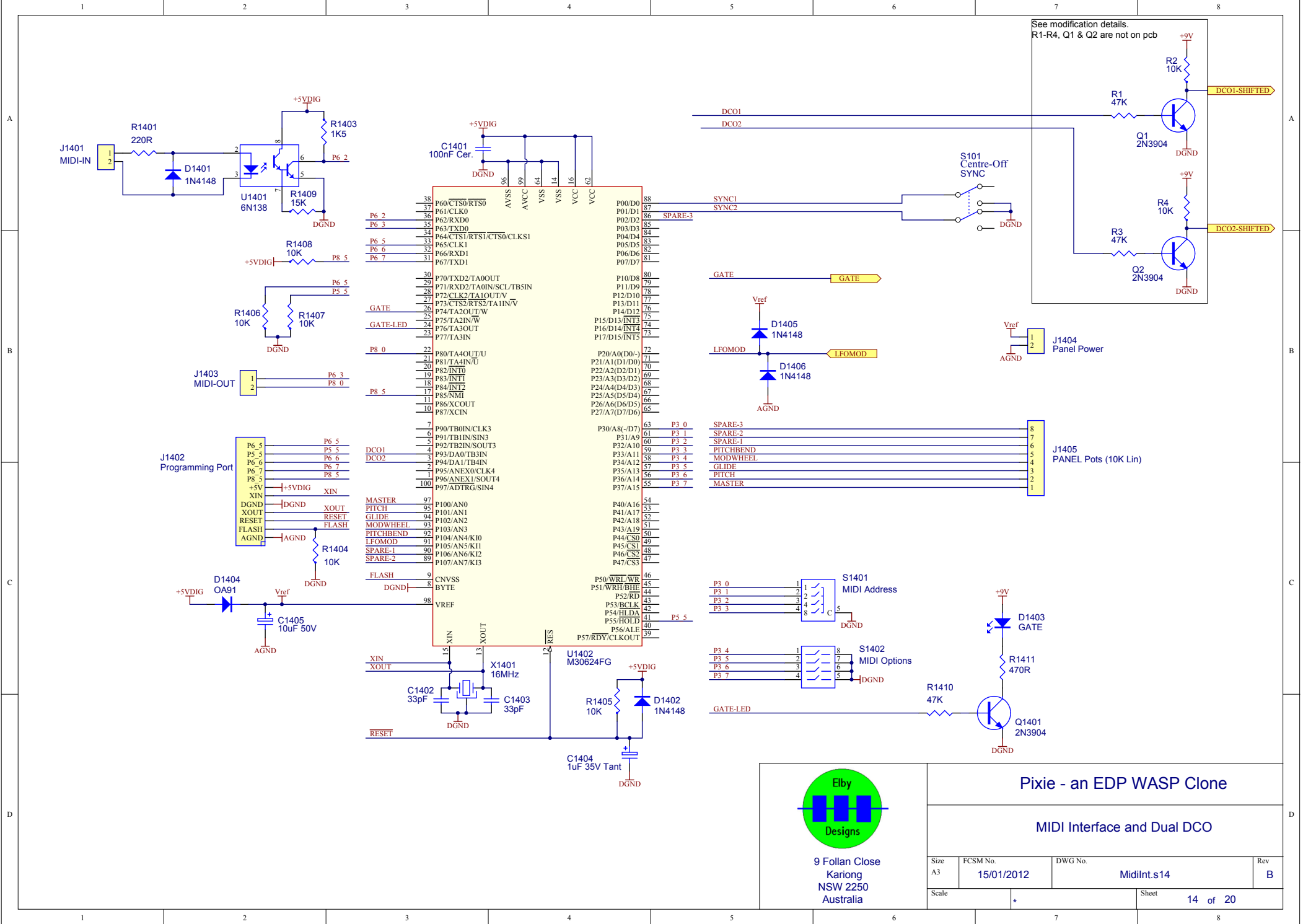


9 Follan Close
Kariang
NSW 2250
Australia

Pixie - An EDP WASP Clone

Voltage Controlled Filter - VCF2

Size A4	FCSM No. 15/01/2012	DWG No. Filter2.s13	Rev B
Scale	Laurie Biddulph		Sheet 13 of 20

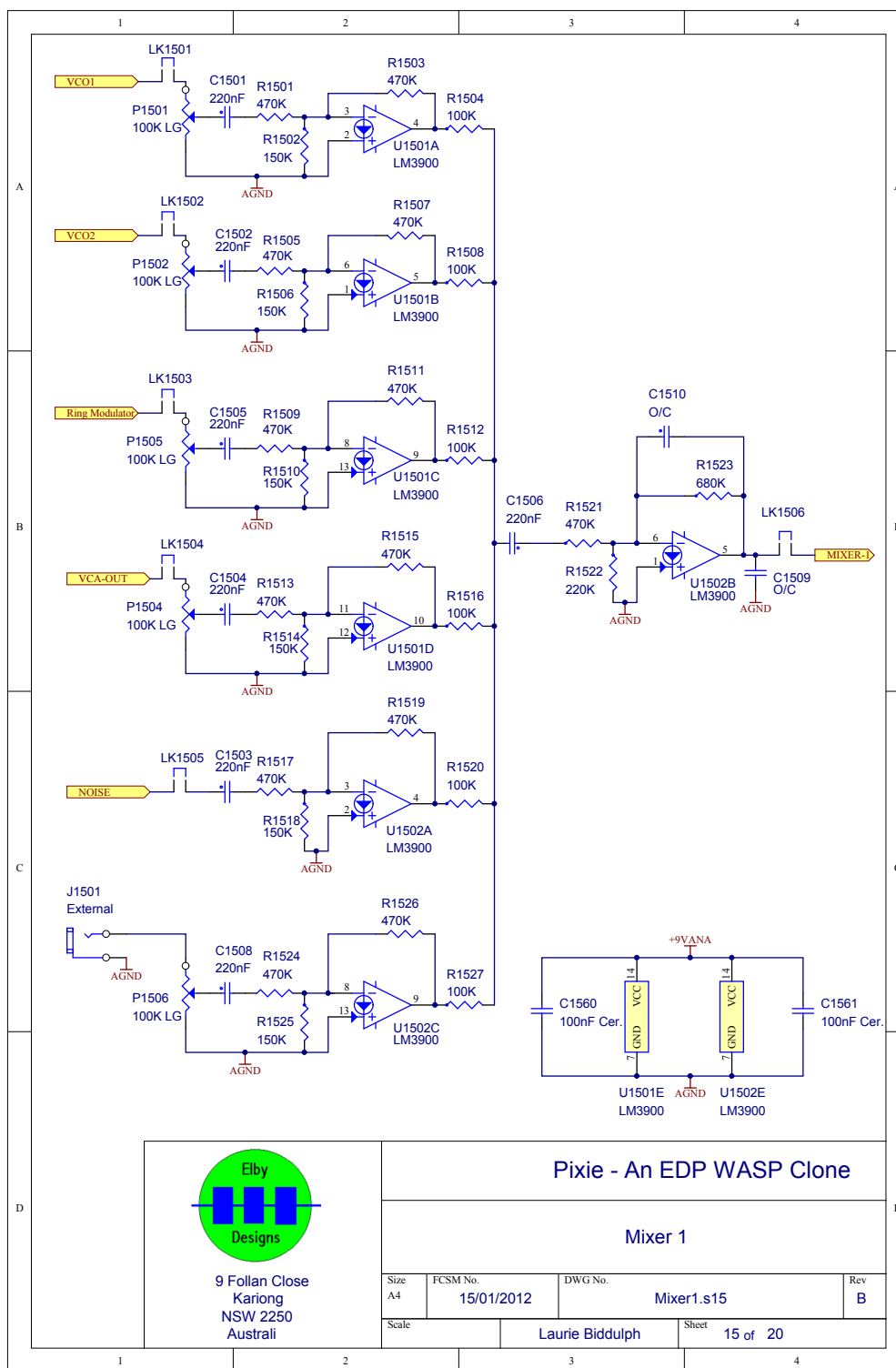


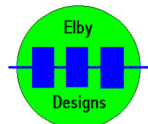
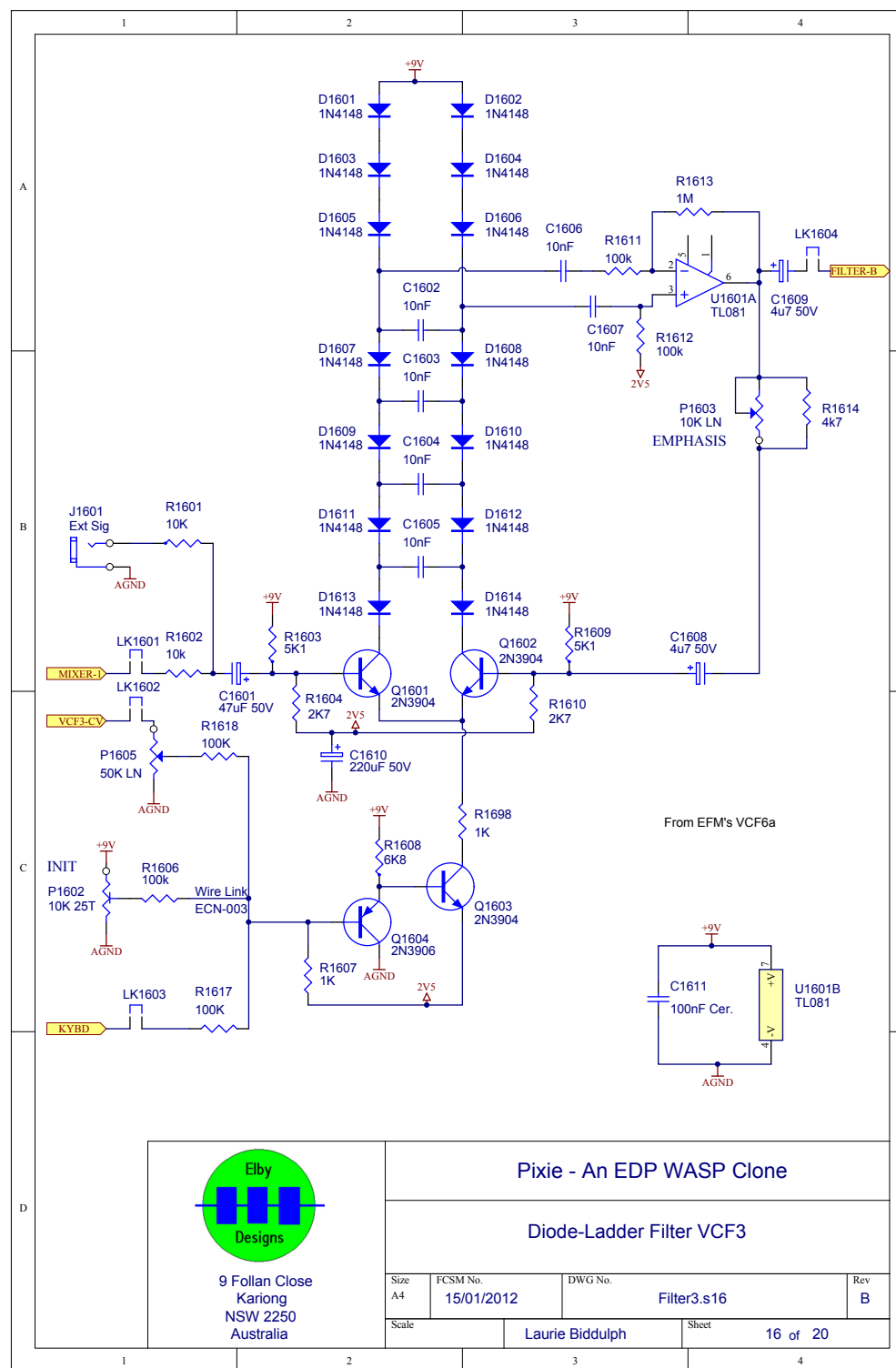
9 Follan Close
Karing
NSW 2250
Australia

Pixie - an EDP WASP Clone

MIDI Interface and Dual DCO

Size	FCSM No.	DWG No.	Rev
A3	15/01/2012	MidiInt.s14	B
Scale	*	Sheet 14 of 20	



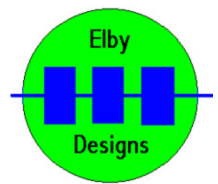
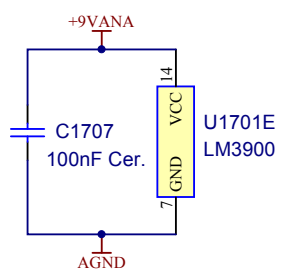
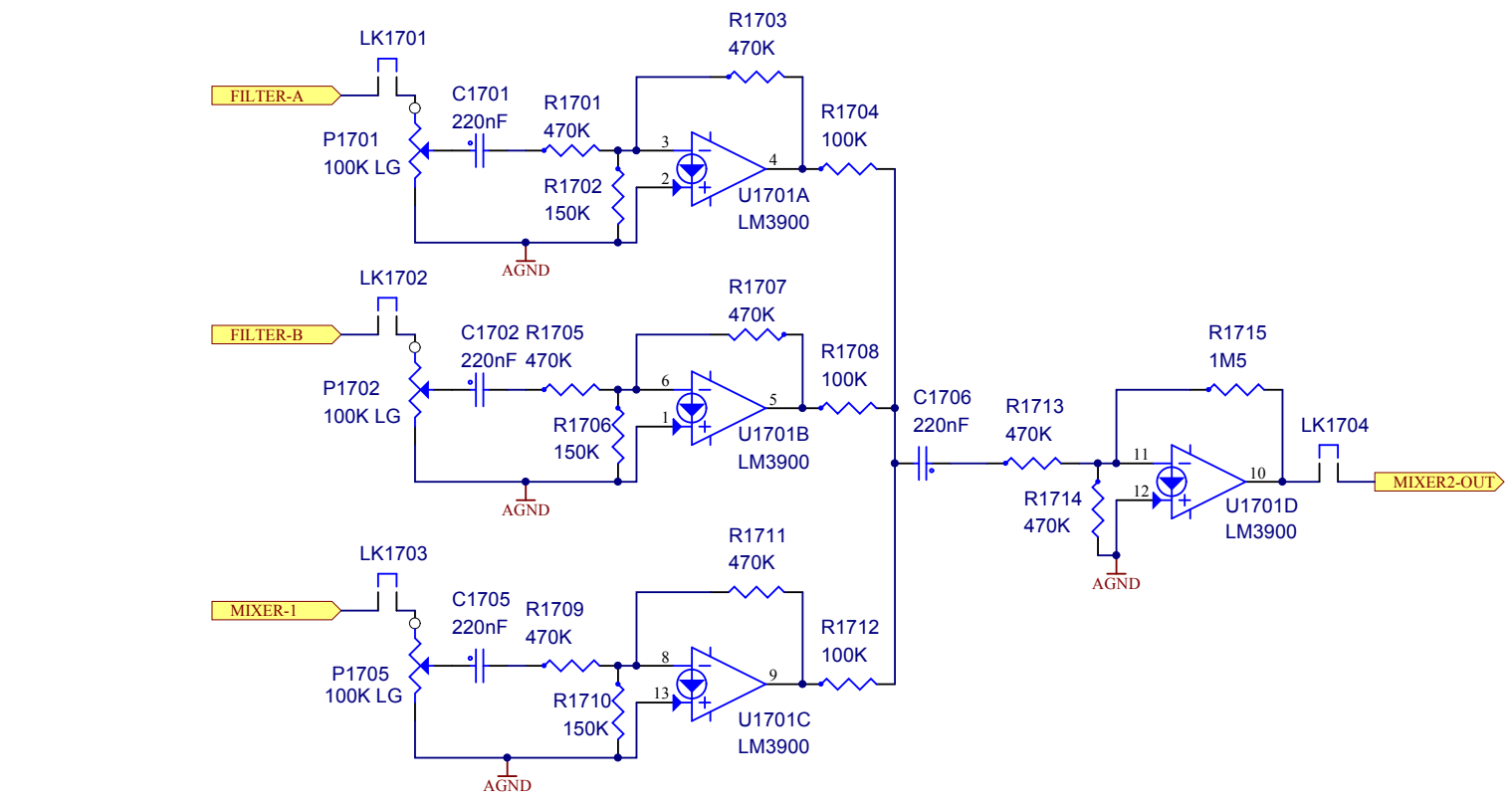


9 Follan Close
Kariong
NSW 2250
Australia

Pixie - An EDP WASP Clone

Diode-Ladder Filter VCF3

Size A4	FCSM No. 15/01/2012	DWG No. Filter3.s16	Rev B
Scale	Laurie Biddulph		Sheet 16 of 20



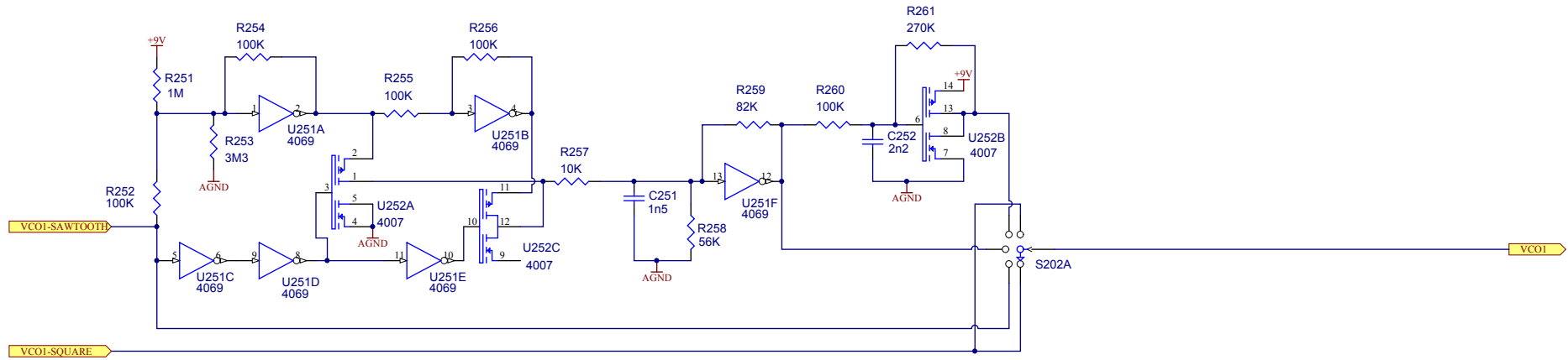
9 Follan Close
Karing
NSW 2250
Australia

Pixie - An EDP WASP Clone

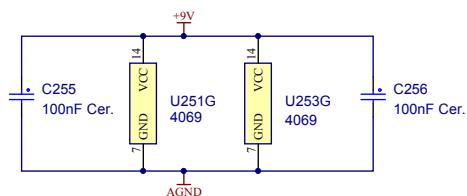
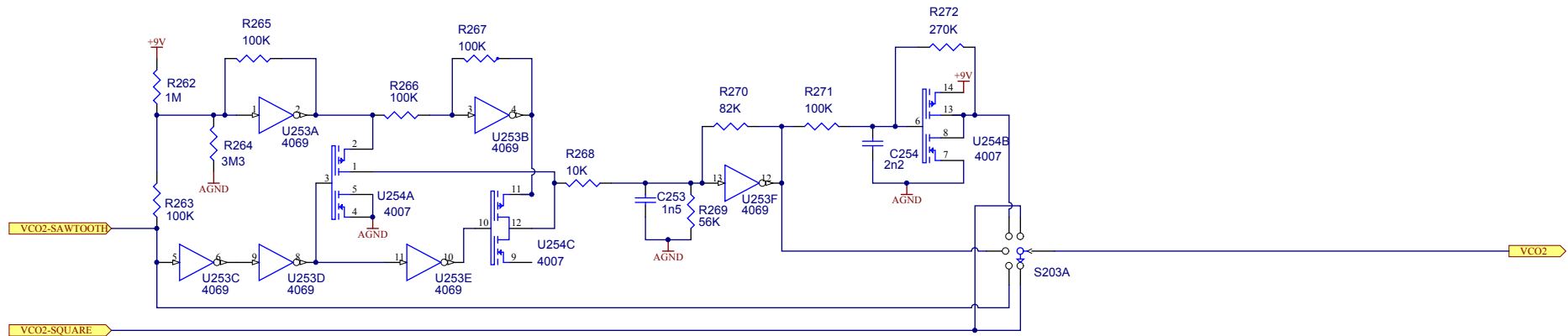
Mixer 2

Size A4	FCSM No. 15/01/2012	DWG No. Mixer2.s17	Rev B
Scale	Laurie Biddulph		Sheet 17 of 20

Taken from a design by Scott Gravenhorst



Waveform selector:-
 1) Square
 2) Sawtooth
 3) Triangle
 4) Sine
 5) Modulated Square

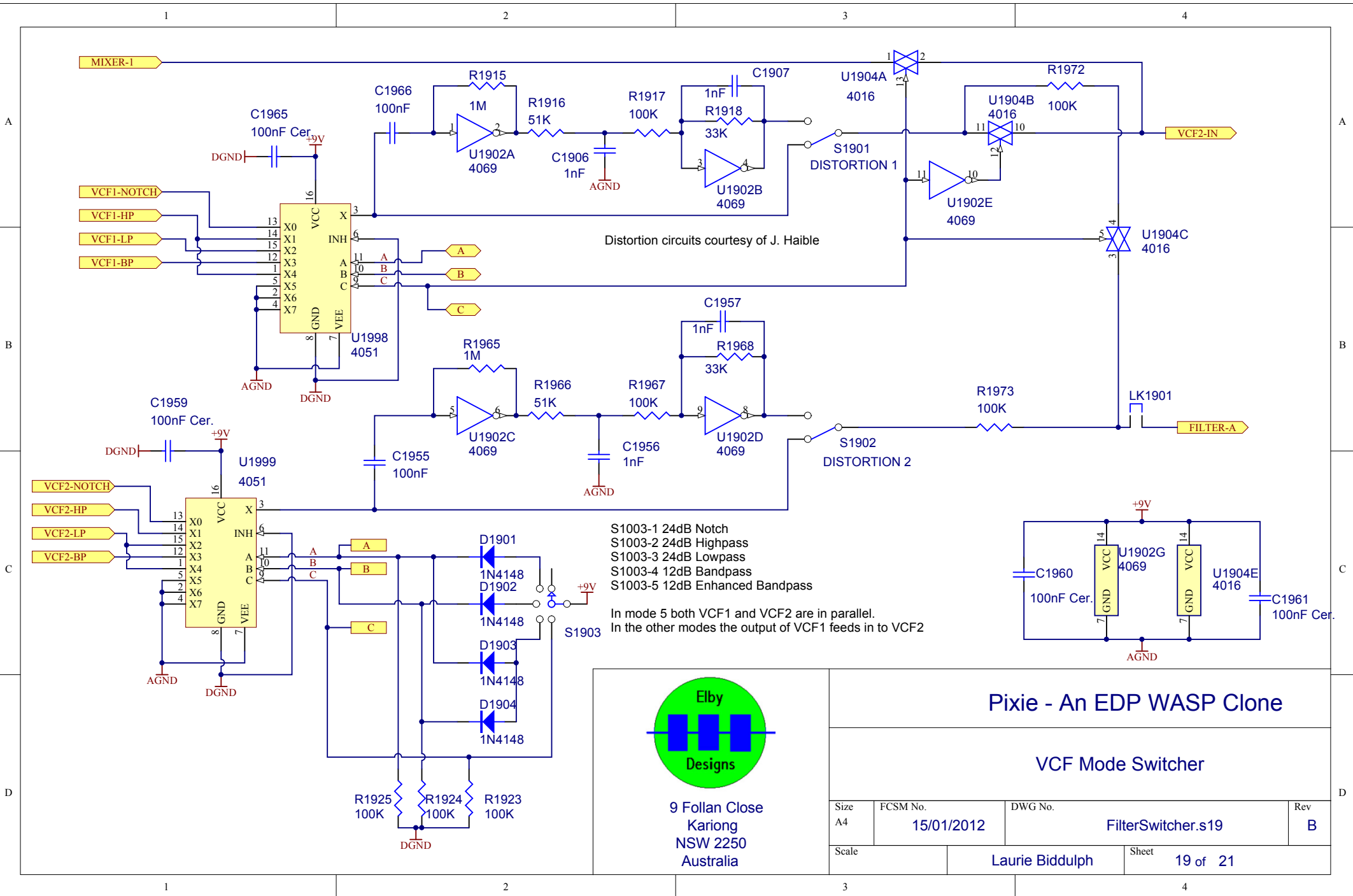


Elby Designs
 9 Follan Close
 Kariang
 NSW 2250
 Australia

Pixie - An EDP WASP Clone

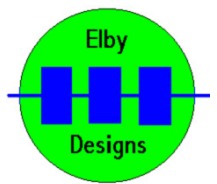
Triangle Generator

Size	FCSM No.	DWG No.	Rev
A3	15/01/2012	Triangle.s18	1
Scale	Laurie Biddulph		Sheet 18 of 21



S1003-1 24dB Notch
S1003-2 24dB Highpass
S1003-3 24dB Lowpass
S1003-4 12dB Bandpass
S1003-5 12dB Enhanced Bandpass

In mode 5 both VCF1 and VCF2 are in parallel.
In the other modes the output of VCF1 feeds in to VCF2

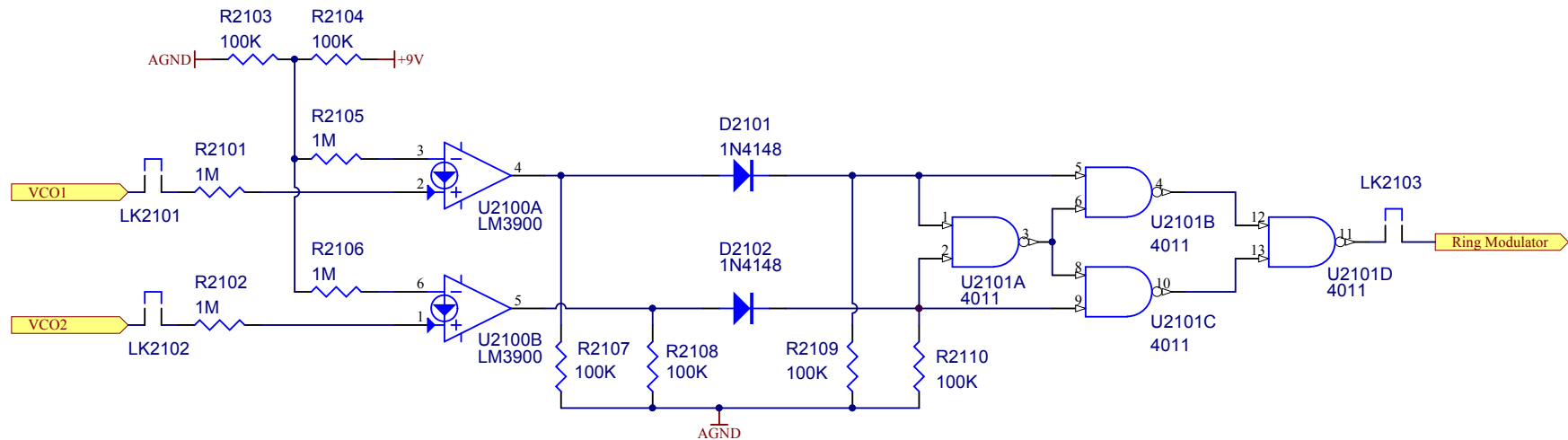


9 Follan Close
Kariong
NSW 2250
Australia

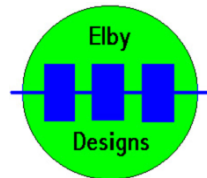
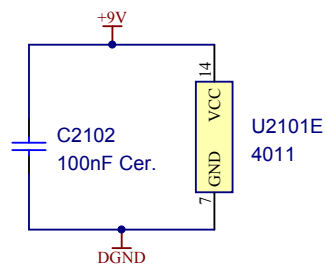
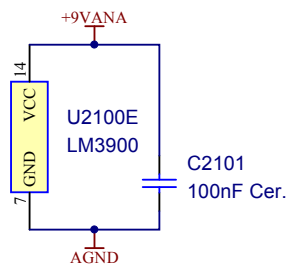
Pixie - An EDP WASP Clone

VCF Mode Switcher

Size A4	FCSM No. 15/01/2012	DWG No. FilterSwitcher.s19	Rev B
Scale	Laurie Biddulph	Sheet 19 of 21	



Taken from the KORG MS20 Ring Modulator



9 Follan Close
Karing
NSW 2250
Australia

Pixie - An EDP WASP Clone

Ring Modulator

Size A4	FCSM No. 15/01/2012	DWG No. RingMod.s21	Rev B
Scale	Laurie Biddulph		Sheet 21 of 20