Simple CV

Introduction

Digital created LFO+ENV with CV-Output. No Displays, No Menues, Minimal buttons, much Scopes, much Led-Ring-Rotarys (Planed for LRE-8x2CS), one big UI with complete functions for one LFO+ENV Voice... switching between the UI-Voices is done from the BREAKOUTMODULES...to this later

LFO+ENV are mixed together softwareside, to use only one CV-Output. 8xCV-Outputs (VOICES) are supported > if u are on a VCF+VCA-Setup = 4 Voices on the Analog-Side (4xFilterbank) Copy Paste for LFOs and ENVelopes between the Voices. Copy Paste for a Songa aka Preset aka Bank aka Program(change) Roland MC303 Style Pattern load (next Preset Display) + Preset Morph between Current-Preset and Next-Preset.

Breakoutmodules for each CV-Output, with Depth-rotary, Focusswitch (Pushrotary), 2x Scopes (LFO+ENV) and LFO/ENV-Switch to show on one Display the Mixed Waveform & to switch the Rotary to “ENV” or “LFO” Mode...(there is only space for one Encoder) The Depth-rotary has no Ledring, want to display it as a bar in the scope...

Whole thing will not be based on Midibox CV... i will copy code snippets and so on, but there will be not compatibility to MB-CV (such big Software i cant understand)

FrontPanel

General Design

The panel size is 3U, Eurorack compliant

FrontPanel

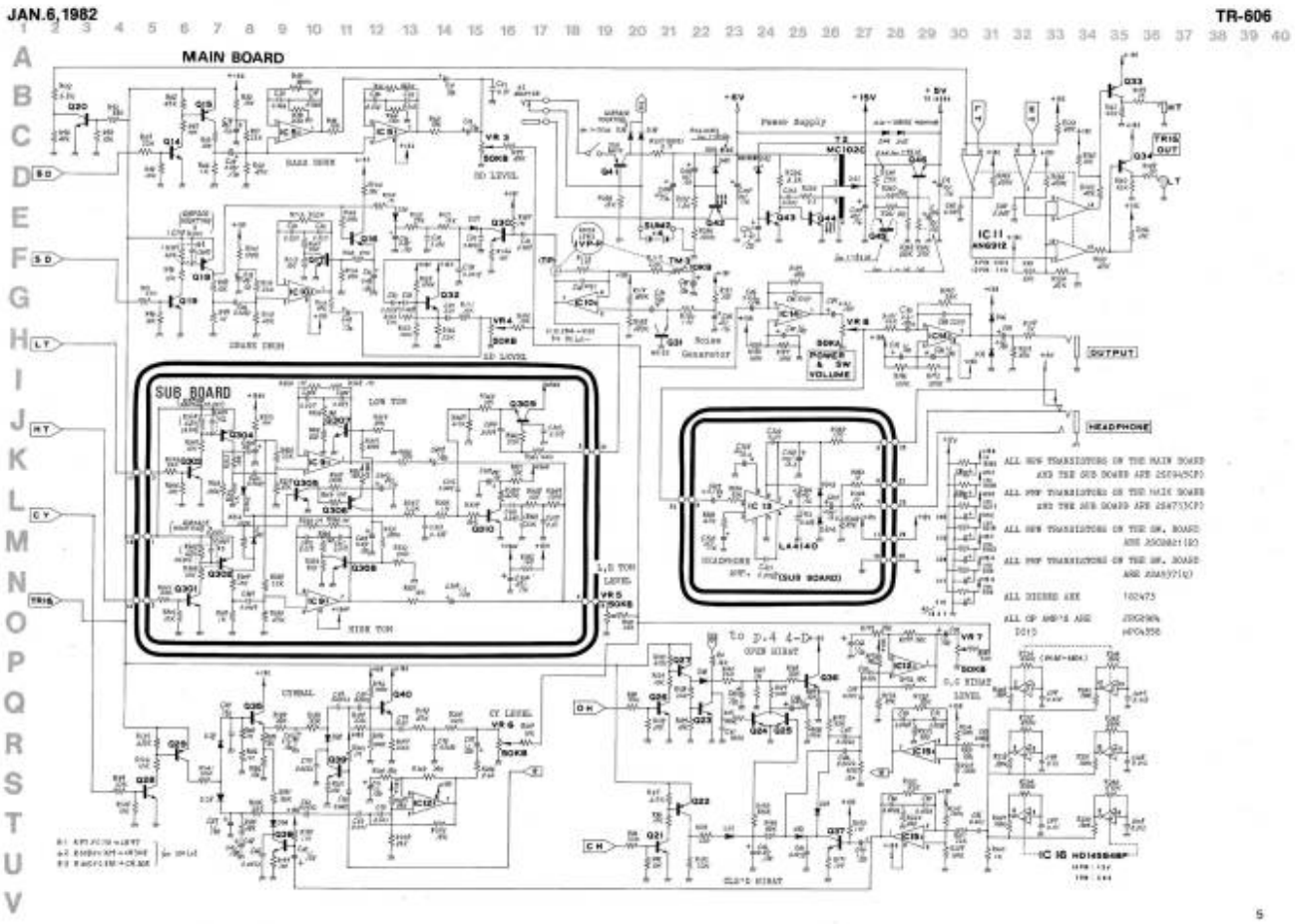
PCBs

The Analog Circuits (VCF+VCA) get sandwitch as normal (not90° angeled)

3D View of Sandwitches

Fix Me! make concept

Original Schematics 303



Fix Me! change against 303

Mods

Mod Sources

Analog Mods

Fix Me! Fill Table with 303 mods

On-Going

1. UI Parts Listing

BRAIN + BREAKOUT

- Jacks 3.5mm @ Thonk
- SPDT Switch ON-OFF-ON @ Rs-components
- Mini DIN 4 poles @ Rs-components

Value	Type	Qty
3.5mm Jack	Vertical PCB-Mount	13
Switch	SPDT Vertical PCB-Mount ON-OFF-ON	1

Fill Table

Pots / Knobs

- Alps RK11K Series
- Alpha Pots @ Thonk
- Knobs Suppliers

Value	Type	Qty
5K	Linear	2
10K	Linear	6
50K	Linear	6
50K	Logarithmic	6
100K	Linear	2
1M	Linear	3
2M?	Linear	2
Knobs	Soft/Plastic/Alu	31

2. Analog Parts Listing

VCA-VCF-Board

Fill Table

3.Footprint Making in KiCAD

- ALPS Pots
- Alpha Pots
- 3,5mm Jack
- Switch
- Momentary Switch
- 7 Segment LED Display
- OLED DIsplay
- Rotary Encoder

Fix Me! have to be done

4. Schematics in KiCAD

Fix Me! have to be done

5.PCB Making In Kicad

PCB Making Order

1. BRAIN PCBs
2. BREAKOUT PCBs
3. FILTER PCBs