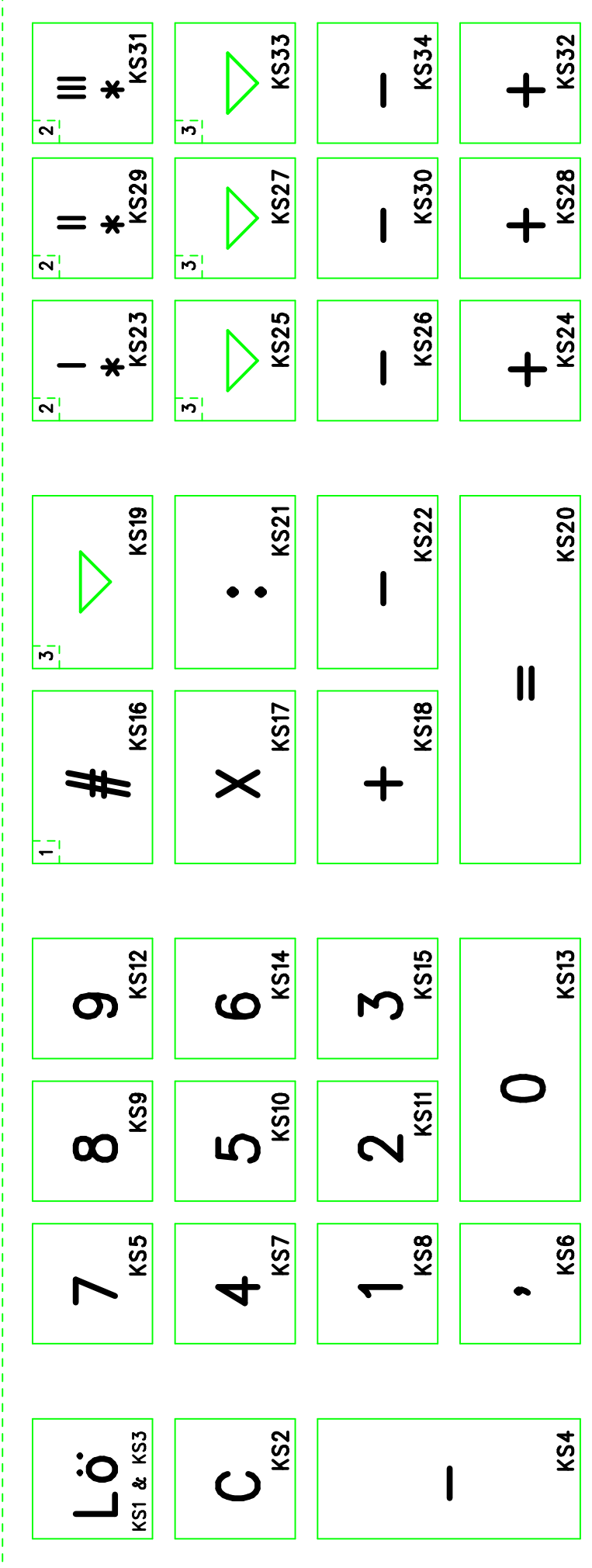
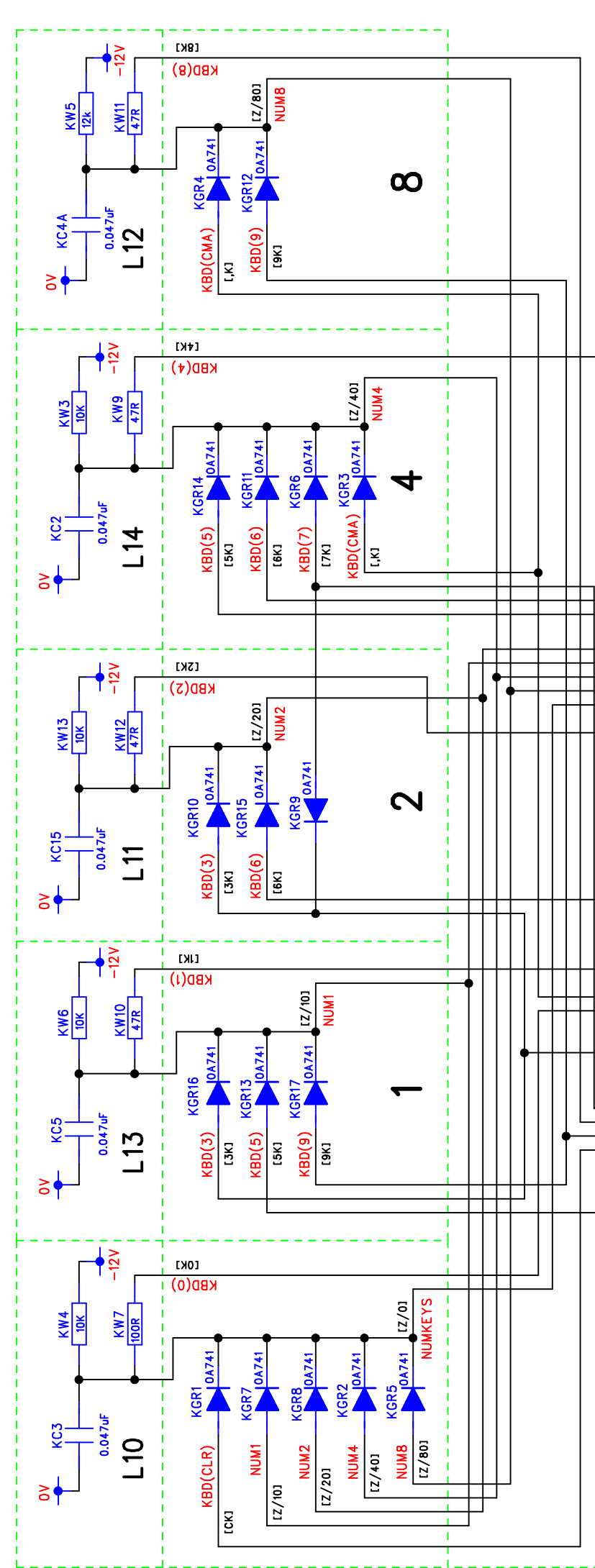


Notes -

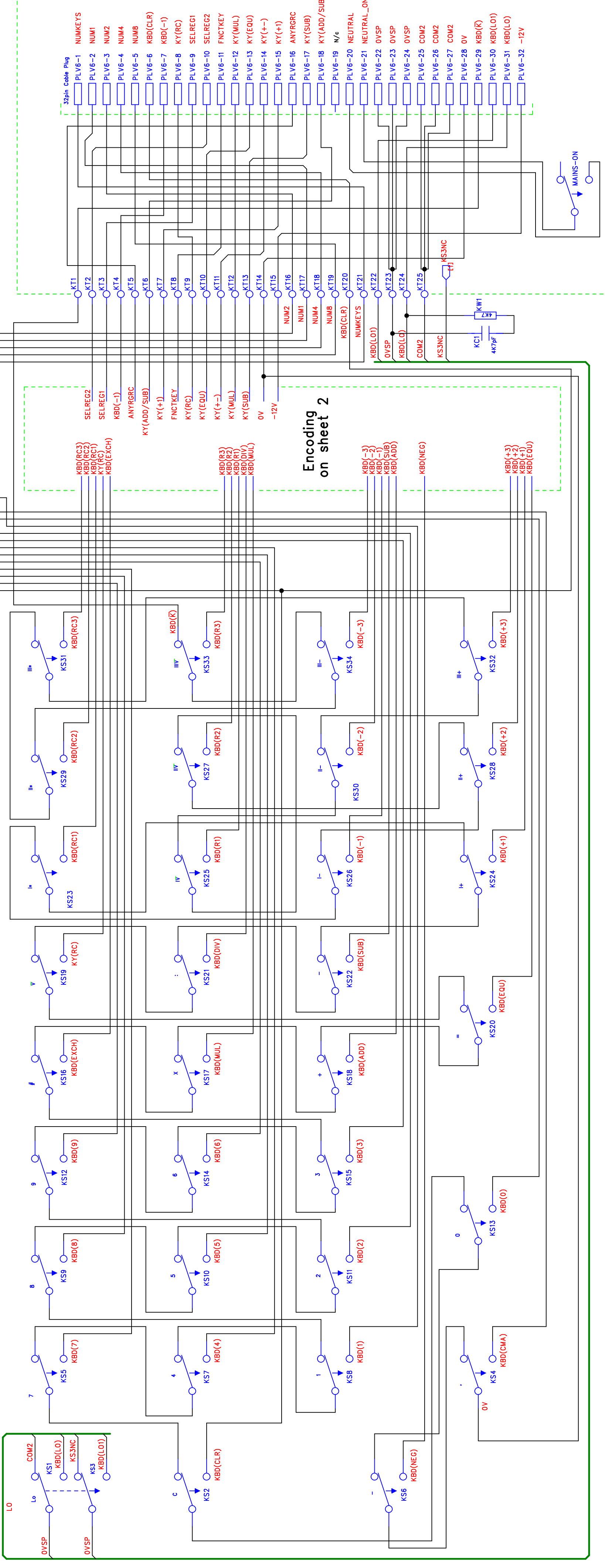
1	#	Exchange operands	4	-	Negate entry
2	I II III	Recall (clears memory)			
3		Recall only			

### Numeric (BCD 0-9), Clear & DP (BCD 12) Encode Matrix



### Keyboard Physical Layout

### Keyboard PCB 224-301-014a



Encoding on sheet 2

DM Associates  
33, Northbrook Road  
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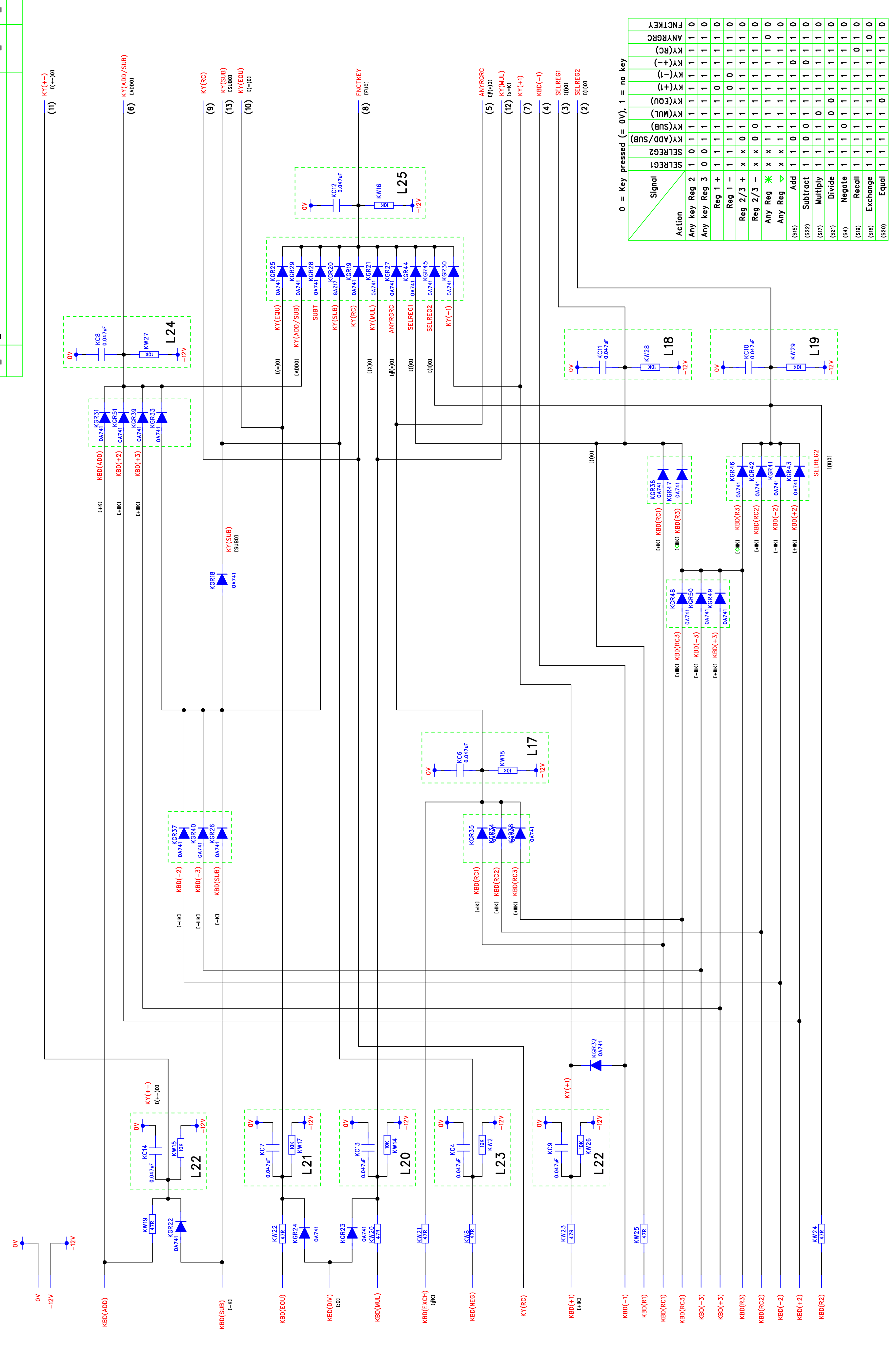
Keyboard & Digit Key Encoder

Soemtron ETR 222 Calculator  
[Keyboard Circuit & Layout]  
[PCB = 224-301-014a]

Scale	Nts	Title
Sheet	1	Soemtron ETR 222 Calculator
Next Sheet	2	[Keyboard Circuit & Layout]
Date	15/8/2017	[PCB = 224-301-014a]
Drawn	MD Hatch	Drawing Number
Checked		Soemtron 222

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These diagrams are referenced to 0V - Logical 1 = -12V, logical 0 = 0V



0 = Key pressed (= 0V), 1 = no key

Action	SELREG1	SELREG2	SELREG3	KY(ADD/SUB)	KY(MUL)	KY(DIV)	KY(NEG)	KY(RC)	KY(+)	KY(-)	KY(+)	KY(-)	ANYRGR	FNCTKEY
Any key Reg 2	1	0	1	1	1	1	1	1	1	1	1	1	1	0
Any key Reg 3	0	0	1	1	1	1	1	1	1	1	1	1	1	0
Reg 1 +	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Reg 1 -	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Reg 2/3 +	x	x	0	1	1	1	1	1	1	1	1	1	1	0
Reg 2/3 -	x	x	0	1	1	1	1	1	1	1	1	1	1	0
Any Reg *	x	x	1	1	1	1	1	1	1	1	1	1	1	0
Any Reg	x	x	1	1	1	1	1	1	1	1	1	1	1	0
Add	1	0	1	1	1	1	1	1	1	1	1	1	1	0
Subtract	1	0	1	1	1	1	1	1	1	1	1	1	1	0
Multiply	1	1	0	1	1	1	1	1	1	1	1	1	1	0
Divide	1	1	0	1	1	1	1	1	1	1	1	1	1	0
Negate	1	1	0	1	1	1	1	1	1	1	1	1	1	0
Recall	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Exchange	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Equal	1	1	1	1	1	1	1	1	1	1	1	1	1	0

Function & Register Key Encoder

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[www.soemtron.org](http://www.soemtron.org)

Pcb Dwg # =

Drawn MD Hatch  
Checked

Name MD Hatch

Date 28/02/2024

Scale Nts

Sheet 2  
Next Sheet 3

Drawing Number Soemtron 222

Title Soemtron ETR 222 Calculator  
Keyboard Function Encoding  
Circuit Diagram

A2 Issue A

These diagrams are referenced to 0V - Logical 1 = -12V, logical 0 = 0V