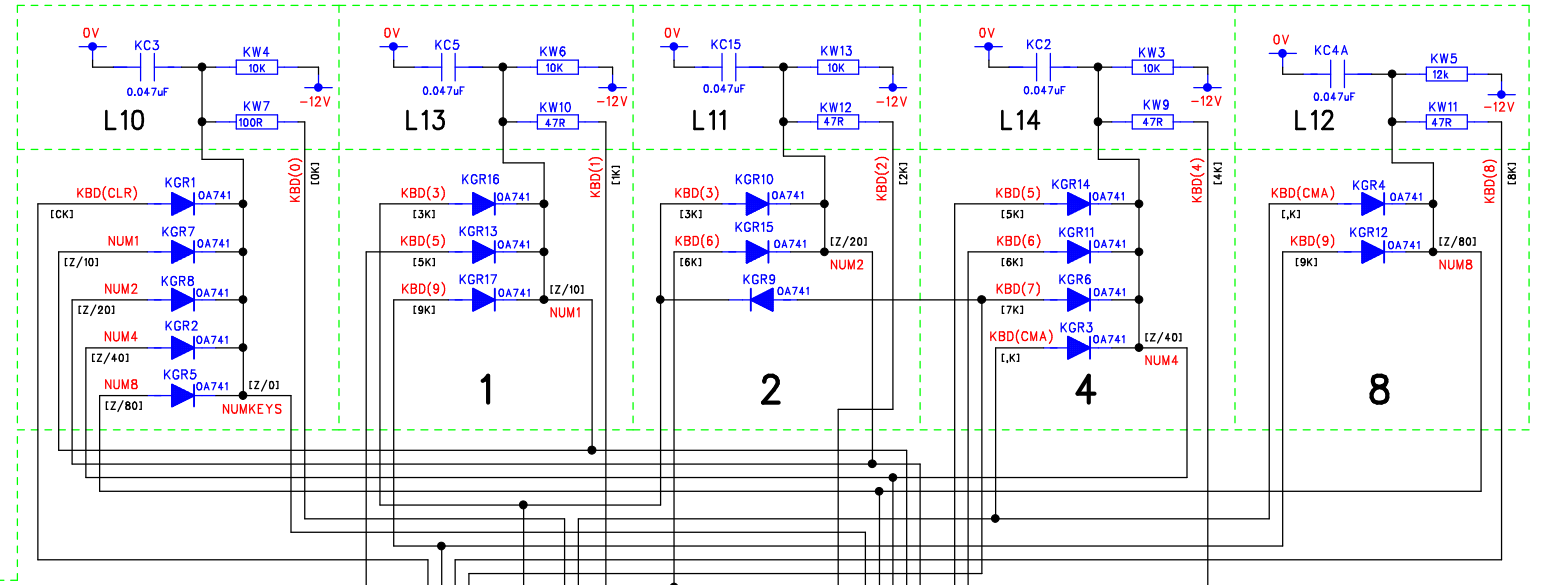


**Notes -**

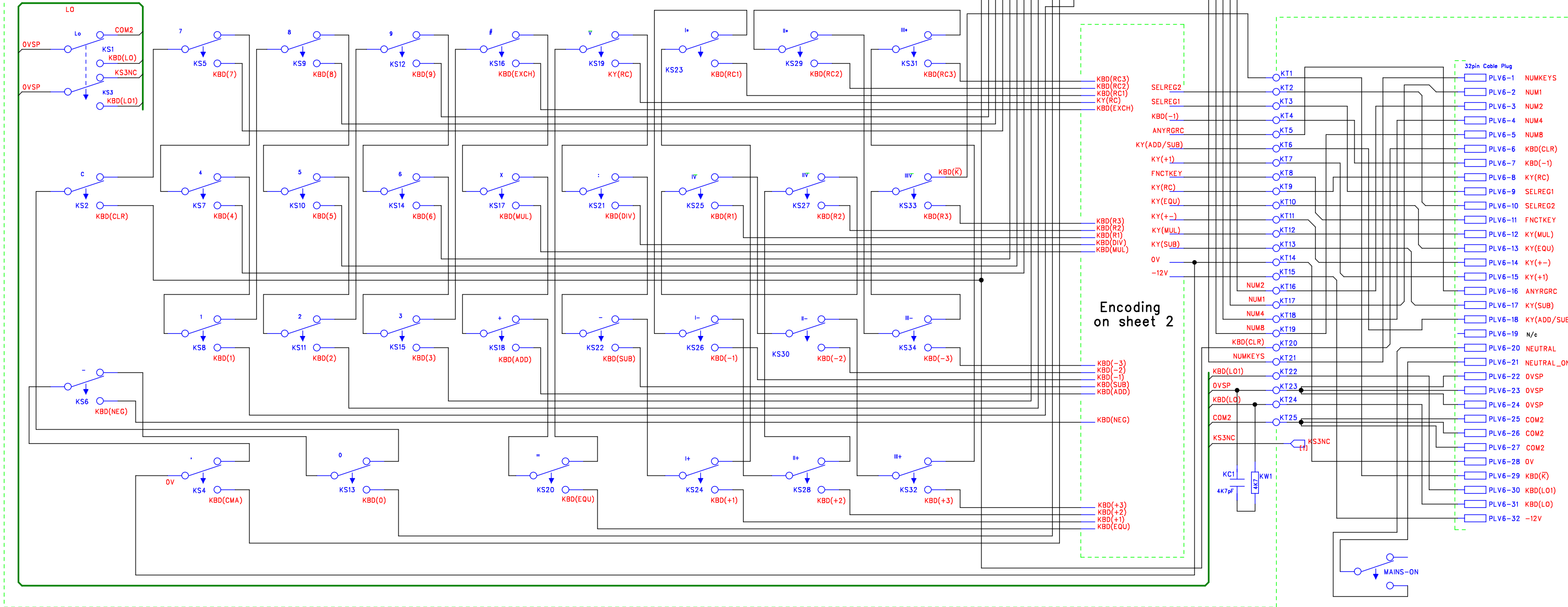
1	#	Exchange operands	4	-	Negate entry
2	I II III *	Recall (clears memory)			
3	▽	Recall only			

RevNo	Revision note	Date	By	Checked
-	-	-	-	-

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



**Keyboard PCB 224-301-014a**



**Encoding on sheet 2**

**Keyboard & Digit Key Encoder**

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



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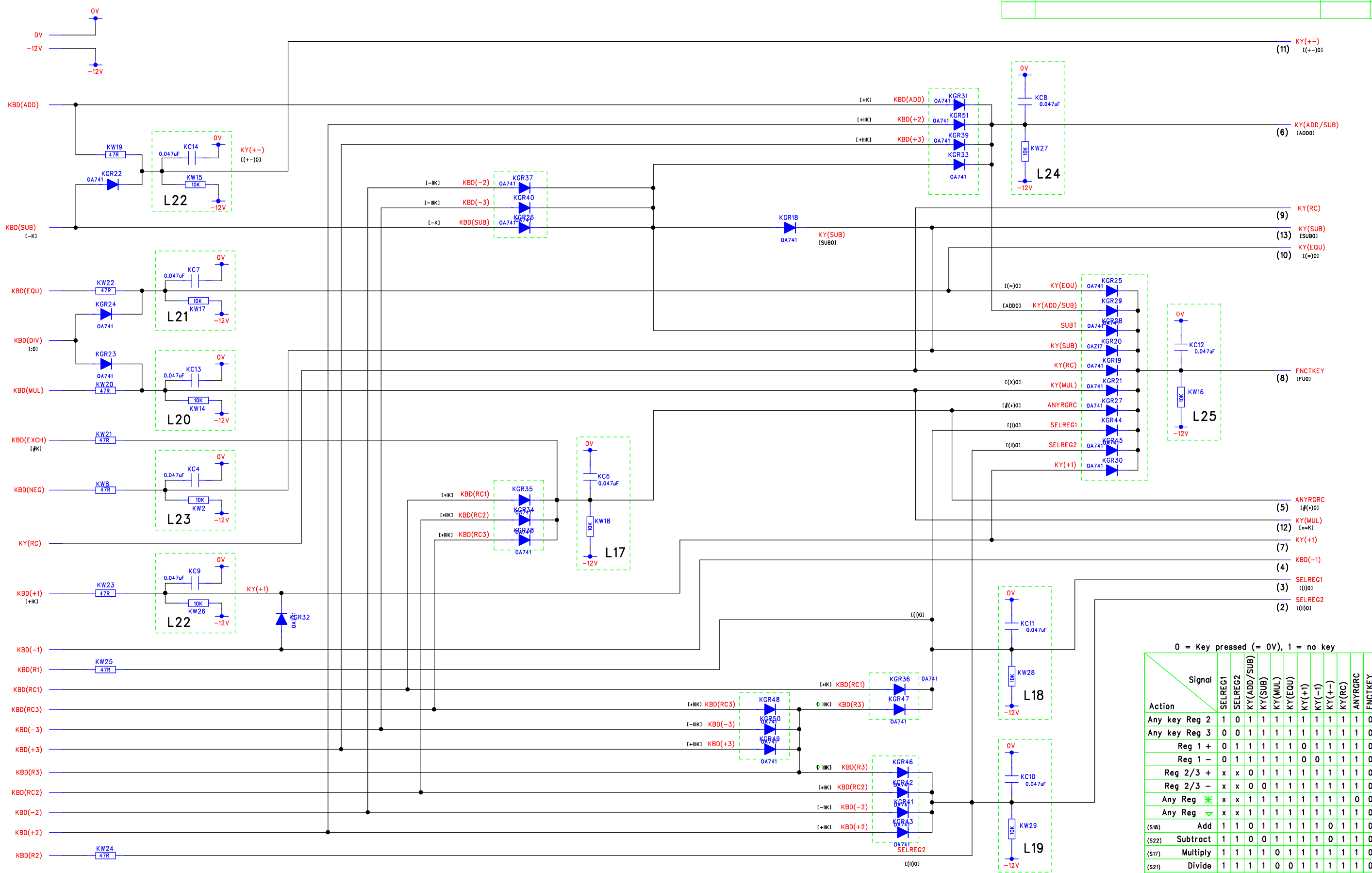
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Pcb Dwg # =

Name	Date
MD Hatch	15/8/2017
Checked	-

Scale	Nts
Sheet 1	1
Next Sheet	2
Drawing Number	Soemtron 222

Title	Soemtron ETR 222 Calculator [Keyboard Circuit & Layout] [PCB = 224-301-014a]
Issue	A2



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

Signal	SELREG1	SELREG2	KY(ADD/SUB)	KY(SUB)	KY(MUL)	KY(EQU)	KY(+1)	KY(-1)	KY(+)	KY(RC)	ANYRGRC	FNCTKEY
Any key Reg 2	1	0	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	0
Reg 1 +	0	1	1	1	1	1	0	1	1	1	1	0
Reg 1 -	0	1	1	1	1	1	0	0	1	1	1	0
Reg 2/3 +	x	x	0	1	1	1	1	1	1	1	1	0
Reg 2/3 -	x	x	0	0	1	1	1	1	1	1	1	0
Any Reg *	x	x	1	1	1	1	1	1	1	1	1	0
Any Reg v	x	x	1	1	1	1	1	1	1	1	1	0
(S18) Add	1	1	0	1	1	1	1	1	1	0	1	0
(S22) Subtract	1	1	0	0	1	1	1	1	1	0	1	0
(S17) Multiply	1	1	1	0	1	1	1	1	1	1	1	0
(S21) Divide	1	1	1	0	0	1	1	1	1	1	1	0
(S4) Negate	1	1	1	0	1	1	1	1	1	1	1	0
(S19) Recall	1	1	1	1	1	1	1	1	1	0	1	0
(S16) Exchange	1	1	1	1	1	1	1	1	1	1	0	0
(S20) Equal	1	1	1	1	0	1	1	1	1	1	1	0

### Function & Register Key Encoder

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



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Pcb Dwg # =

Name	Date
MD Hatch	15/8/2017
Checked	-

Scale	Nts
Sheet	2
Next Sheet	3
Drawing Number	Soemtron 222

Title	Soemtron ETR 222 Calculator Keyboard Function Encoding Circuit Diagram
Issue	A2
By	A