Export ROM

Pico Electronics single chip calculator C 550 Firmware
hacked by bITmASTER

Sources:
- Richi´s Lab (die photos)
- Patent 4,001,556
- https://web.archive.org/web/20160709203233/http://www.spingal.plus.com/micro/

	0		1		2		3		4		5		6		6 dont care	REM	Addr	NA1	NA2	
	Addressdecoder																Addr			
60	1		1		1		1		1		1		1			Intterupt: +-*/	0	12	13	Test NumberKey
64	1		1			1	1		1		1		1			Interrupt: DP	1	2	37	0 + 1 at Ts, answer in DP, set DP
68	1			1	1		1		1		1		1				2	37	0	A’=0, set N, reset NEG
63	1			1		1	1		1		1		1			Interrupt: Number	3	4	5	A X 10, DP x10
66	1		1		1			1	1		1		1				4	5	0	A’ = 0, DP = 0, set N, reset NEG
23	1		1			1		1	1		1		1			read Number Key	5	6	8	A=N @ T8
53	1			1	1			1	1		1		1				6	7	8	A/10, DP/10, DP?
08	1			1		1		1	1		1		1				7	8	40	Ia+1, Address?
34		1	1		1		1		1		1				1		8	9	37	nop, DP = 0 @ T0 ?
14		1	1			1	1		1		1				1		9	10	33	DP/10, Address?
22		1		1	1		1		1		1				1		10	37	9	Ia-1, Address?
69		1		1		1	1		1		1				1	Interrupt: Reset	11	68	0	A=0,O= DP, Reset NEG, N and DP
29		1	1		1			1	1		1				1		12	37	63	K?
54		1	1			1		1	1		1				1		13	14	15	nop, DP?
12		1		1	1			1	1		1				1		14	15	61	0+ 1 at T8, ans in DP, Address?
11		1		1		1		1	1		1				1		15	16	24	Ia-1, Address?
70	1		1		1		1			1	1				1		16	18	17	A X 10, reset N and DP. IA>=80?
24	1		1			1	1			1	1				1		17	18	15	nop, A=0?
35	1			1	1		1			1	1				1		18	19	18	IA+ 1, DP x 10, DP=0 @T0?
59	1			1		1	1			1	1				1		19	27	20	A/10 DP/10
46	1		1		1			1		1	1				1		20	22	21	DP:=1, B >= 8 @ T0?
67	1		1			1		1		1	1				1	B<0 then N:=1	21	22	71	B:=0-B
30	1			1	1			1		1	1				1		22	62	23	C’ =B' , K?
52	1			1		1		1		1	1				1		23	64	38	C’ =B' , A+S?
25		1	1		1		1			1	1				1		24	25	61	nop, A=0?
05		1	1			1	1			1	1				1		25	26	32	A/10
21		1		1	1		1			1	1				1		26	27	25	Ia+1
31		1		1		1	1			1	1				1		27	30	28	B‘=A’
61		1	1		1			1		1	1				1		28	30	29	B‘=C‘
16		1	1			1		1		1	1				1		29	30	0	B:=0-B
50		1		1	1			1		1	1				1		30	67	31	C'=A' , NEG?
65		1		1		1		1		1	1				1	C<0 then DP=1	31	67	63	C:=0-C
71	1		1		1		1		1			1			1		32	33	26	0+ 1 at T1 ans in DP, reset N
38	1		1			1	1		1			1			1		33	10	34	Ia=0?
51	1			1	1		1		1			1			1		34	36	35	A*10, DP*10, NEG?
26	1			1		1	1		1			1			1		35	36	36	A=0?
18	1		1		1			1	1			1			1		36	37	36	A/10, DP/10, Address?
00	1		1			1		1	1			1			1		37	37	0	Recirc A,B,C & DP, Display A
39	1			1	1			1	1			1			1	add/sub routine	38	39	65	Aexp:=A-B
47	1			1		1		1	1			1			1		39	41	7	IA>=80 or 80>IA>=60
48		1	1		1		1		1			1			1		40	65	7	A/10, IA>=80 or 80>IA>=60
01		1	1			1	1		1			1			1		41	42	0	Aexp:=A+B
02		1		1	1		1		1			1			1		42	43	0	Bexp+1
20		1		1		1	1		1			1			1		43	38	0	B/10
57		1	1		1			1	1			1			1		44	45	46	Aexp:=B+0, DP*10, S?
41		1	1			1		1	1			1			1	add	45	24	47	Am:=A+B, A>=8 @T0
42		1		1	1			1	1			1			1	sub	46	24	47	Am:=A-B, A>=8 @T0
56		1		1		1		1	1			1			1	negative result	47	24	44	Am:=0-A
43	1		1		1		1			1		1			1	multiply routine	48	49	51	Am:=Am-1000_0000, A>=8 @T0
44	1		1			1	1			1		1			1		49	48	50	Bm:=B+C, CY?
03	1			1	1		1			1		1			1		50	48	0	Am:=A+1
13	1			1		1	1			1		1			1		51	52	0	Am:=A+1000_0000
19	1		1		1			1		1		1			1		52	53	56	A*10, B*10, DP*10
36	1		1			1		1		1		1			1		53	54	48	A:=A+B0, DP=0?
17	1			1	1			1		1		1			1		54	55	0	Aexp:=A+C, A*10,B*10
06	1			1		1		1		1		1			1		55	24	0	A:=A+B0
45		1	1		1		1			1		1			1	division routine	56	57	58	A-C, ans in A, Ia - Ic, ans in Ib
15		1	1			1	1			1		1			1		57	56	0	B+ 1 @ T8
37		1		1	1		1			1		1			1		58	59	52	A+C,ans in A DP=0@T0?
28		1		1		1	1			1		1			1		59	60	15	A'=B'
04		1	1		1			1		1		1			1		60	24	0	A/10
27		1	1			1		1		1		1			1		61	25	66	AX10,IA-1
09		1		1	1			1		1		1			1		62	63	0	B'=A'
10		1		1		1		1		1		1			1		63	23	70	A'=C'
58	1		1		1		1		1		1			1		Mult/Div?	64	56	48	B = 0, set NEG; M?
62	1		1			1	1		1		1			1			65	71	69	N?
49	1			1	1		1		1		1			1			66	61	25	80>IA>=60?
32	1			1		1	1		1		1			1			67	68	32	nop, K?
07	1		1		1			1	1		1			1			68	32	37	B'=C'
33	1		1			1		1	1		1			1			69	47	21	K?
40	1			1	1			1	1		1			1			70	20	31	A>=8 @T0
55	1			1		1		1	1		1			1			71	44	47	DP?
															56			**71**	**71**	
															128			52	42	

row	1: C2@T8Key	2: ALU_E→A	2: ALU_M→A	3: A*/10	4: ALU_E→B	4: ALU_M→B	5: A→Y	6: B*/10	7: ALU_M→C	7: ALU→C	8: A→X	9: B→X	10: B→Y	11: C→Y	12: Y=1 @T1	13: Y=1 @T8 Ti2	14: B0→Y	15: add_sub	16: ALU→DP	17: DP*/10	18: down_up	1: N	2: NEG	3: DP	4: K	5: A+S+M+D	6: M	7: A+S	8: S	9: A=0	10: A>=8 @T0	11: DP=0 @T0	12: IA=0	13: IA>=80	14: Carry	15: Address	16: B>=8 @T0	17: 80>IA>=60	Sign	setN	resN	setDP	resDP	X1	X2	setNEG	resNEG	switchNA2	switchNA1
	Control																					Test																		ControlSet										
60																						1																											
64																1			1			1																				1							
68		1	1																																					1							1		
63				1																1		1																											
66		1	1																1																					1							1		
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