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- * System developed for in2H2 inc. by Intermotion Technology, Inc.

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* Full system RTL, C sources and board design files available at https://github.com/nearist

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*

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- * Hayk Ghaltaghchyan System Software

*

- * Tecno77 S.r.l. Team Members:
- * Stefano Aldrigo, Board Layout Design

*

- * We dedicate this project to the memory of Bruce McCormick, an Al pioneer
- * and advocate, a good friend and father.

*

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NH1701		
ill Of Materials		
m Quantity Reference	Part	P/N
C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C28, C31, C33, C35, C36, C40, C461, C462, C		GRM155C80J105KE15
161, C1F1, C1F1, C1F1, C1F1, C1F1, C1F1, C1F1, C1F1, C1F1, C1F2, C	, 10nF , , , , , , , , , , , , , , , , , , ,	GRM155R71C103KA01
3 2 C23, C24 4 23 C25, C26, C56, C57, C58, C72, C73, C74, C88, C89, C90, C104, C105, C106, C120, C121, C122, C136, C137, C138, C152, C153, C154	22pF 22uF 25V	GRM1555C1H220JA01J GRM32EC81E226KE15
27, C29, C30, C32, C39, C40, C39, C44, C79, C180, C181, C182, C183, C184, C291, C202, C203, C204, C205, C206, C207, C272, C273, C274, C277, C276, C276	10uF	GRM155C80J475MEAA
6 22 C49, C50, C51, C52, C53, C54, C495, C496, C497, C498, C499, C501, C503, C504, C505, C506, C507, C508, C509, C511, C512	220nF 16V	GRM155R71C224KA12
7 15 C55, C70, C71, C86, C87, C102, C103, C118, C119, C134, C135, C150, C151, C166, C594 8 7 C59, C75, C91, C107, C123, C139, C155	330pF 16V 100nF 50V	GRM155R71H331KA01 GRM188R71H104KA93
9 14 C61, C67, C77, C82, C93, C95, C108, C115, C124, C131, C143, C145, C157, C163 10 8 C62, C79, C96, C111, C126, C146, C158, C595	DNP 1nF 50V	GRM188R71H102KA01
11 99 C126A2, C138F3, C138B3, C138B3, C138B3, C138B3, C138B3, C138B1, C139C1, C139C1, C139C1, C139C1, C139C1, C139C1, C139C2, C139C2, C139C2, C139C2, C139C2, C139C2, C139C2, C139C2, C139C2, C139C3,	100uF 6.3V	GRM32EC70J107ME15L
12 14 C68, C69, C84, C85, C100, C101, C116, C117, C132, C133, C148, C149, C164, C165 13 3 C457, C458, C484	10uF 25V 100nF	GRM188C81E475KE11 GRM155R71C104KA88
14 3 D1, D2, D3	150141M173100	150141M173100
15 1 D9 16 2 D10, D11	PMLL4148L115 STPS5L60U	PMLL4148L115
17 1 D12	SM4T23AY	STPS5L60U SM4T23AY
18	FUSE 15A SLOW (0501015.WR) BNX023-01L	0501015.WR BNX023-01L
20 1 F3	FUSE 2A	0603SFV200F/32-2
21 1 J1 22 1 12	39301080 PCLEXPRESS_X4	39301080
22 1 J2 23 1 J3	PCI-EXPRESS-X4 HSEC8-140-01	
24 1 J10	MOLEX - 22-11-2032	22-11-2032
	600R@100MHz 680.0 nH	BLM15AX601SN1D XAL1010-681MEB
25 3 L1, L2, L3		
25 3 L1, L2, L3 26 4 L4, L5, L6, L7 27 3 L8, L9, L10	3.3 uH	XAL1010-332MEB
25 3 L1, L2, L3 26 4 L4, L5, L6, L7 27 3 L8, L9, L10 28 15 Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q24, Q37, Q38, Q39	3.3 uH NDS331N	NDS331N
25 3 L1, L2, L3 26 4 L4, L5, L6, L7 27 3 L8, L9, L10	3.3 uH	

33	7 RR8, RR9, RR10, RR12, RR13, RR14, RR15	47R	
	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R1G1, R1F1, R1E1, R1D1, R1C1, R1B1, R1A1, R11, R1G2, R1F2, R1E2, R1D2, R1C2, R1B2, R1A2, R1E3, R1E3, R1E3, R1E3, R1B3, R1A3, R1A3, R1A3, R1A, R15, R16, R17, R18, R19, R20, R2G1, R2F1, R2E1, R2D1, R2C1, R2B1, R2A1, R2C1, R2B2, R2E2, R2D2, R2C2, R2B2, R2B3, R2B3, R2B3, R2B3, R2B3, R2B3, R2B3, R2B3, R3B3, R3B	,	
34	248 R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R53, R54, R55, R62, R63, R64, R65, R66, R67, R68, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R10G1, R10F1, R10E1, R10D1, R10C1, R10B1, R10C1, R10B1, R10C1, R10B1, R10C2, R10E2, R10E2, R10E2, R10E2, R10E2, R15E3, R15E	4K7 1%	
	R16G1, R16F1, R16E1, R16D1, R16C1, R16B1, R16A1, R16G2, R16F2, R16E2, R16D2, R16C2, R16B2, R16G2, R16G3, R16F3, R16E3, R16D3, R16C3, R16B3, R16A3, R201, R202, R203, R219, R220, R221, R222, R223, R224, R225, R226, R227, R228, R229, R230, R234, R237, R238, R240, R244, R246, R247, R271, R276, R280, R281, R282, R287, R287, R289, R300, R301, R322, R323		
35	R4G1, R4F1, R4E1, R4D1, R4C1, R4B1, R4A1, R4G2, R4F2, R4E2, R4D2, R4C2, R4B2, R4A2, R4G3, R4F3, R4E3, R4B3, R4B3, R4B3, R4B3, R4B3, R4B3, R7B1, R7C1, R7B1, R7C1, R7B1, R7C1, R7B1, R7C1, R7B1, R7C2, R7B2, R7C2, R7B2, R7C2, R7B2, R7C3, R7E3, R7C3, R7E3, R7C3, R7B3, R7C3, R7B3, R7C3, R1SF1, R1SE1, R1SE1, R1SE1, R1SE1, R1SE1, R1SE1, R1SE1, R1SE1, R1SE1, R1SE2, R1SE2, R1SE2, R1SE2, R1SE2, R1SE2, R1SE2, R1SE3,	100R 0.1%	
36	44 R5G1, R5F1, R5E1, R5D1, R5C1, R5B1, R5A1, R5G2, R5F2, R5E2, R5D2, R5C2, R5B2, R5A2, R5G3, R5F3, R5E3, R5D3, R5C3, R5B3, R5A3, R6G1, R6F1, R6E1, R6D1, R6C1, R6B1, R6A1, R6G2, R6F2, R6D2, R6C2, R6B2, R6A2, R6G3, R6F3, R6E3, R6D3, R6C3, R6B3, R6A3, R204, R205	240R 1%	
37	4 R56, R57, R59, R60	1K2	
38	1 R58	4K3	
39	17 R61, R306, R307, R308, R309, R310, R311, R312, R313, R314, R315, R316, R317, R318, R319, R320, R321	180R	
	R69, R106, R107, R11G1, R11F1, R11E1, R11D1, R11C1, R11B1, R11A1, R11G2, R11F2, R11E2, R11D2, R11E2, R11D2, R11B2, R11A2, R11F3, R11E3, R11D3, R11C3, R11B3, R11B3, R11B3, R11B3, R11B1, R12E1, R12E1, R12E1, R12E1, R12E1, R12E1, R12E1, R12E1, R12E1, R12E2,		
40	83 R12E3, R12D3, R12C3, R12B3, R12A3, R132, R133, R145, R146, R158, R159, R17G1, R17G2, R17G2, R17G3, R18G1, R18G2, R18G3, R184, R185, R19G1, R19G2, R19G2, R19G3, R197, R199, R20G1, R20G2, R20G3, R211, R212, R217, R231, R235, R236, R239, R284, R285, R286, R288, R305	DNP	
41	43 R8G1, R8F1, R8E1, R8D1, R8C1, R8D1, R8C1, R8B1, R8A1, R8G2, R8F2, R8E2, R8E2, R8E2, R8D2, R8D2, R8D2, R8B2, R8B3, R8B3, R8B3, R8B3, R8B3, R8B3, R8B3, R8B1, R9D1, R9C1, R9B1, R9D1, R9C1, R9B1, R9D2, R9C2, R9B2, R9D2, R9C2, R9B2, R9D3, R9C3, R9B3, R9C3, R9B3, R9C3, R9B3, R9C3, R9B3, R9C3, R9C	100R 1%	
42		10K	
43	· · · · · · · · · · · · · · · · · · ·	698R 1%	
44	7 R100, R113, R126, R139, R152, R165, R178	0R1	
45	14 R101, R108, R116, R122, R129, R135, R142, R148, R153, R160, R166, R173, R180, R187	2R7	
46	14 R102, R103, R114, R115, R127, R128, R140, R141, R154, R155, R167, R168, R179, R181	47R	
47	7 R104, R117, R130, R143, R156, R170, R182	30K1	
48	2 R105, R118	24K9	
49	19 R109, R121, R134, R147, R161, R174, R166, R207, R208, R209, R210, R213, R214, R215, R216, R204, R304, R324	0R	
50	6 R123, R125, R137, R149, R150, R188	17K8	
51	2 R131, R144	37K4	
52	2 R138, R163	27K4	
53	3 R151, R176, R189	38K3	
54	1 R157	20K5	
55	1 R164	56K2	
56	1 R169	69K8	
57	1 R177	86K6	
58	1 R183	95K3	
59	1 R190	133K	
60	15 R241, R242, R243, R245, R249, R250, R290, R292, R293, R294, R295, R296, R297, R298, R299	15R 1%	
61	1 R248	330R 1%	
62	1 SW1	1437566-3	2468741
63	24 TP1, TP2, TP3, TP1G1, TP1A1, TP1G2, TP1A2, TP1G3, TP1A3, TP2G1, TP2A1, TP2G1, TP2A1, TP2G2, TP2A2, TP2G3, TP3A1, TP3G1, TP3A2, TP3G3, TP3A3, TP4G1, TP4G2, TP4G3	2mm	
64	10 U1, U2, U3, U4, U5, U6, U7, U8, U9, U10	SN74AVC4T774-VQFN	SN74AVC4T774RGYR
65	21 U1G1, U1F1, U1F1, U1D1, U1C1, U1B1, U1A1, U1G2, U1F2, U1F2, U1F2, U1E2, U1B2, U1A2, U1G3, U1F3, U1E3, U1B3, U1A3	LFE5U-85F-8BG381C	LFE5U-85F-8BG381C
66	1 U11	CAT24M01HU5I-GT3	CAT24M01HU5I-GT3
67	1 U12	MCP9808T-E/MC	2080524
68	1 U13	ATMEGA1284P-MU	ATMEGA1284P-MU
69	1 U14	LP2981-33DBVT	
70	1 U15	TPS2115ADRBT	TPS2115ADRBT
71	7 U16, U17, U18, U19, U20, U21, U22	TPS544C20RVFT	TPS544C20RVFT
72	44 U2G1, U2F1, U2E1, U2D1, U2C1, U2B1, U2A1, U2G2, U2F2, U2E2, U2D2, U2C2, U2B2, U2B2, U2B3, U2B3, U2B3, U2B3, U2B3, U2A3, U24, U25, U3G1, U3F1, U3E1, U3D1, U3C1, U3B1, U3A1, U3G2, U3F2, U3E2, U3B2, U3B2, U3B2, U3B3,	AS4C512M16D3L-12BCN	AS4C512M16D3L-12BCN
73	1 U23	XC7A75T-2FGG676C	XC7A75T-2FGG676C
74	3 U26, U27, U28	TPS7A8400RGRT	TPS7A8400RGRT
75	1 U29	S25FS256S-BGA24	S25FS256SAGBHV200-ND
76	1 U31	TPS51200	TPS51200DRCT
77	1 Y1	20MHZ	ABM7-20.000MHZ-B4-T
78	3 Y2, Y3, Y4	SIT9002AI-38N18DD200.0000	SIT9002AI-38N18DD200.0000