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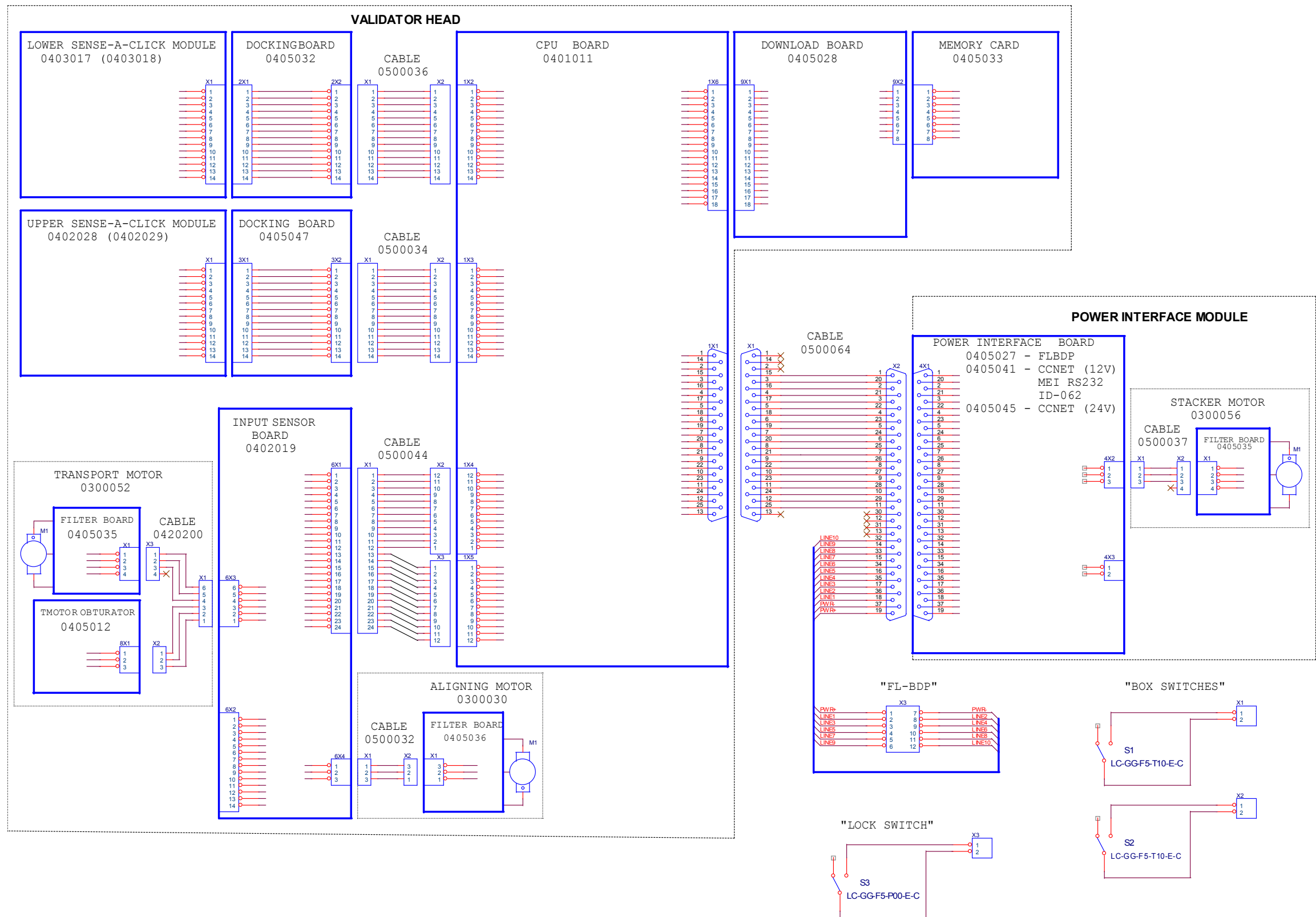
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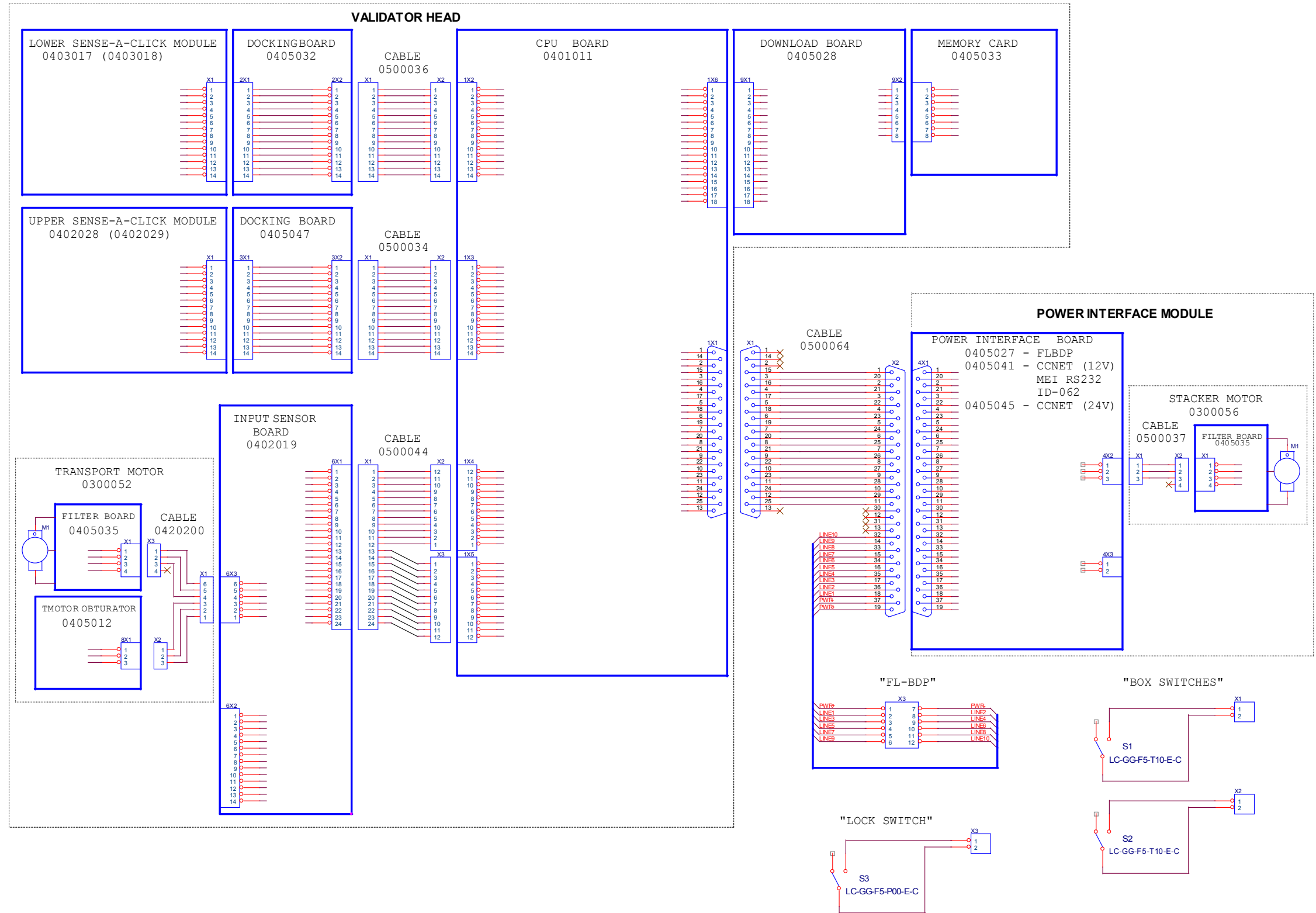
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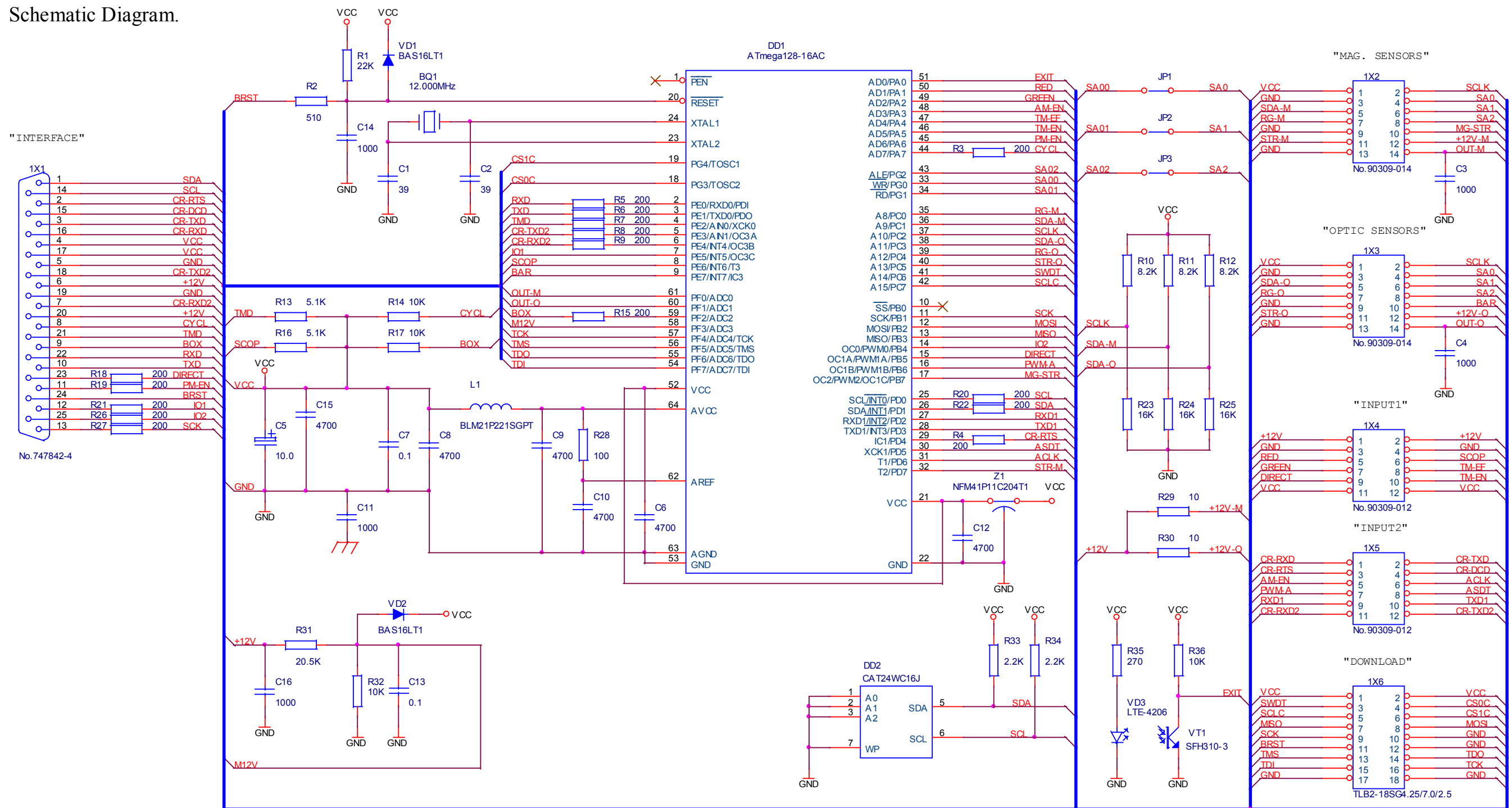
1. FL02
With Aligning Unit.
Block Diagram.



2. FL02
Without Aligning Unit.
Block Diagram

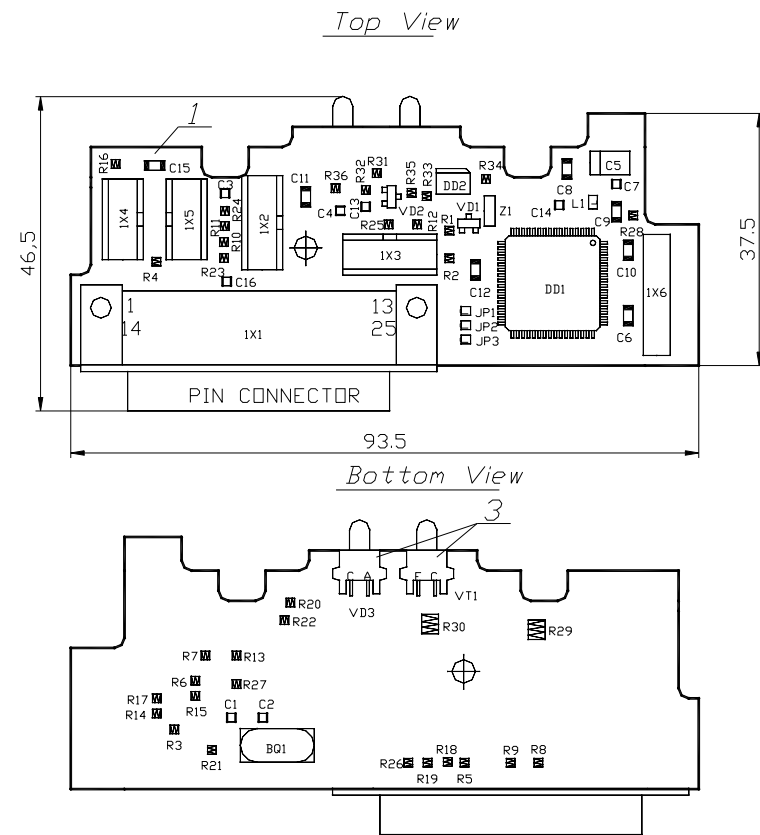


3. 0401011
CPU Board.
Schematic Diagram.



VARIABLE PARTS

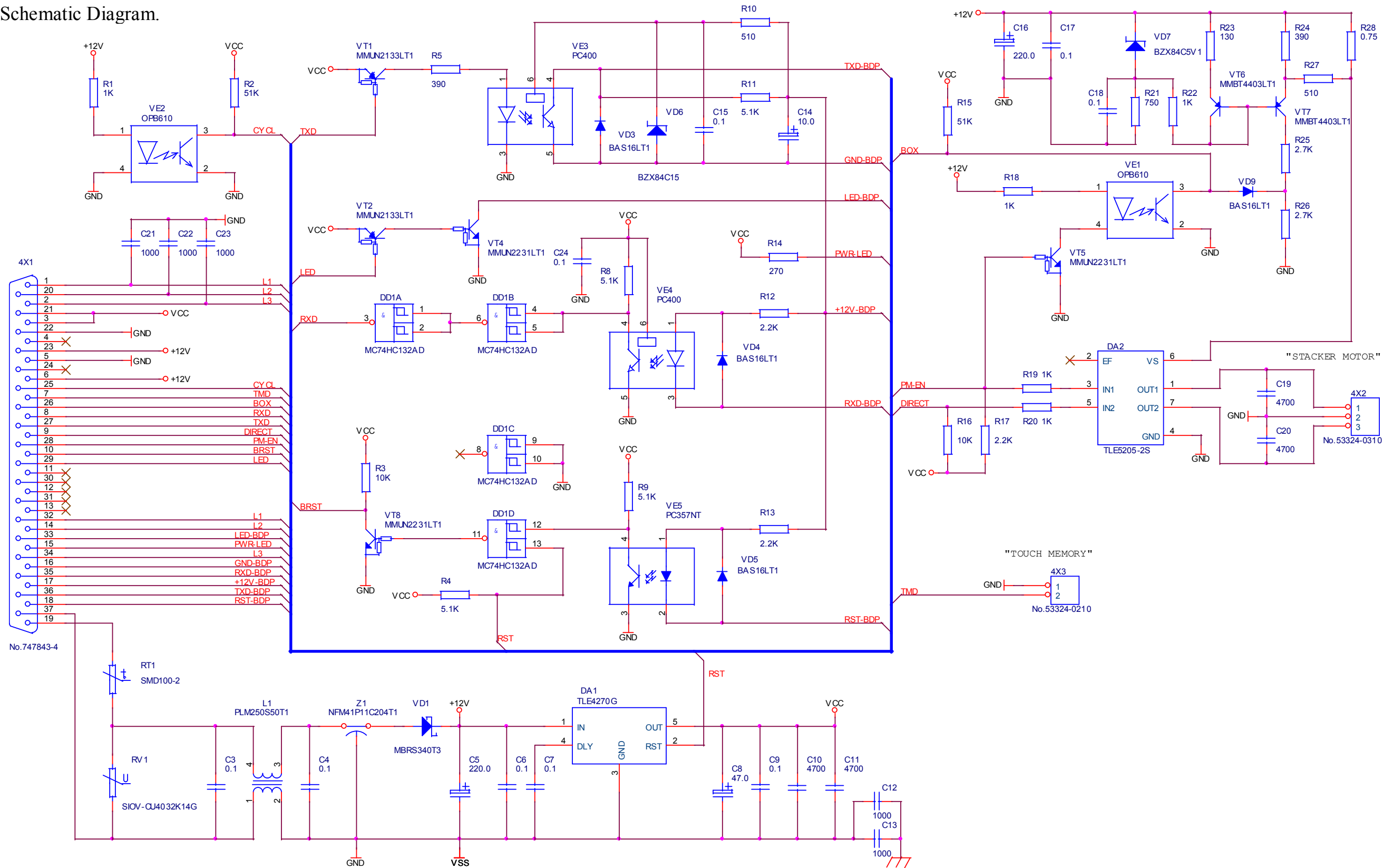
PART	JP1, JP2, JP3
0401011	PRESENT
0401011-01	ABSENT

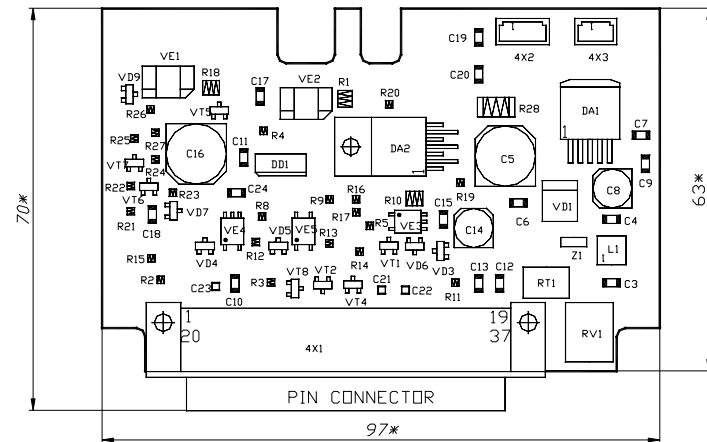
3.1 0401011, Assembly Drawing.

3.2 0401011, Bill of Materials.

Components and Others Parts	
Quartz Crystal	
m1258	BQ1
Capacitors	
m970	C7, C13
952	C6, C8, C9, C10, C12, C15
949	C3, C4, C14, C16
931	C1, C2
m923	C11
980	C5

I.C.'s	
m27	DD1
m50	DD2
Resistors	
1060	R14, R17, R36
1041	R3...R9, R15, R18, R19...R22, R26, R27
m1008	R10, R11, R12
1056	R13, R16
1099	R23, R24, R25
1039	R28
m1007	R29, R30
m1020	R31
m1035	R32
1053	R33, R34
m1014	R35
m1016	R2
m1021	R1
Semiconductors	
705	VD1, VD2
810	VD3
822	VT1
Filters	
m1352	Z1
m1412	L1
Connectors	
m1186	1X1
m1174	1X4, 1X5
m1198	1X2, 1X3
m1146	1X6

4. 0405027
 Power Interface Board.
 FLBDP Interface.
 Schematic Diagram.

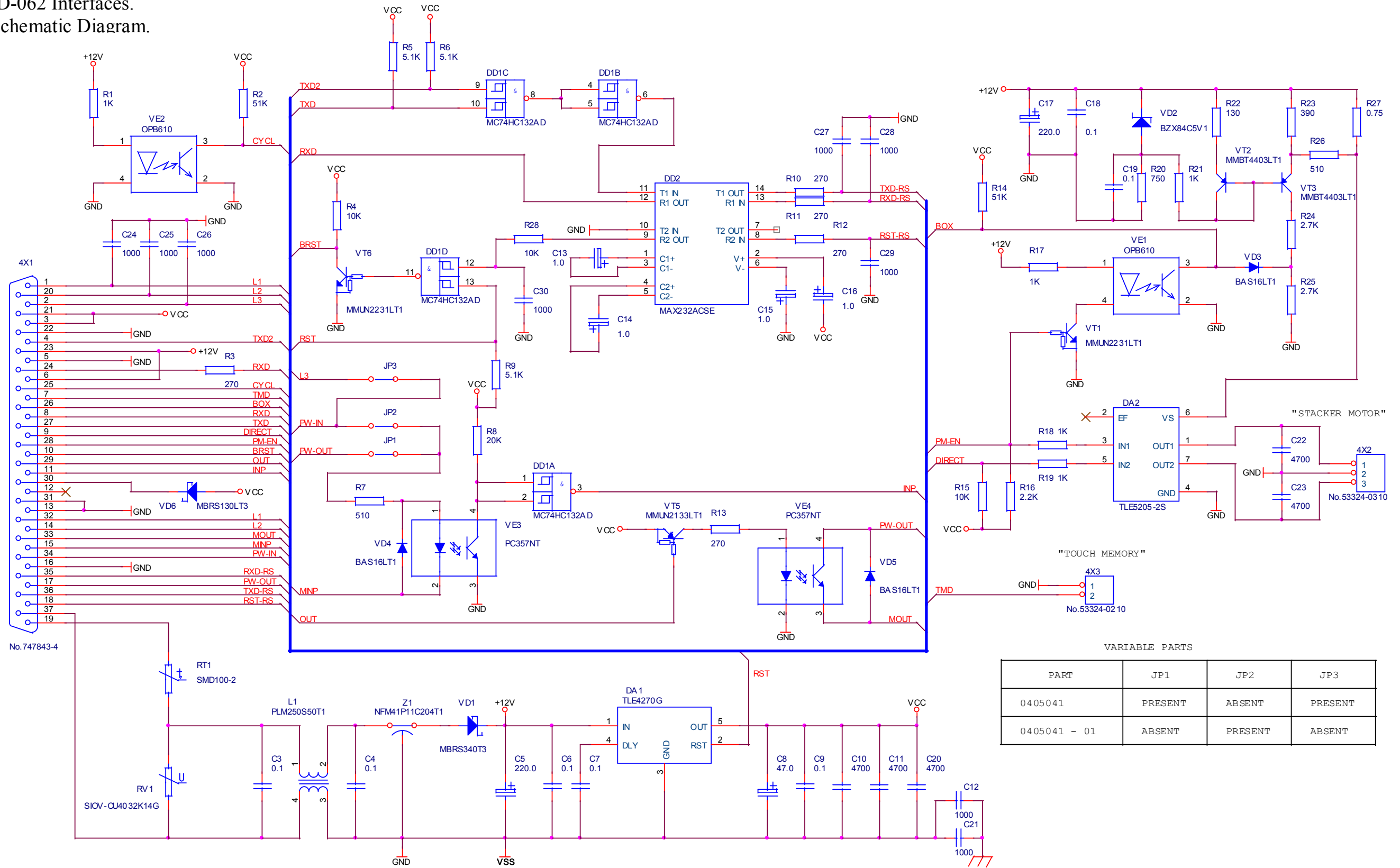


4.1 0405027, Assembly Drawing.

4.2 0405027, Bill of Materials.

Components and Others Parts	
Capacitors	
970a	C3, C4, C6, C7, C9, C15, C17, C18, C24
952	C10, C11, C19, C20
949	C21, C22, C23
m923	C12, C13
m911	C5, C16
m907	C8
998	C14

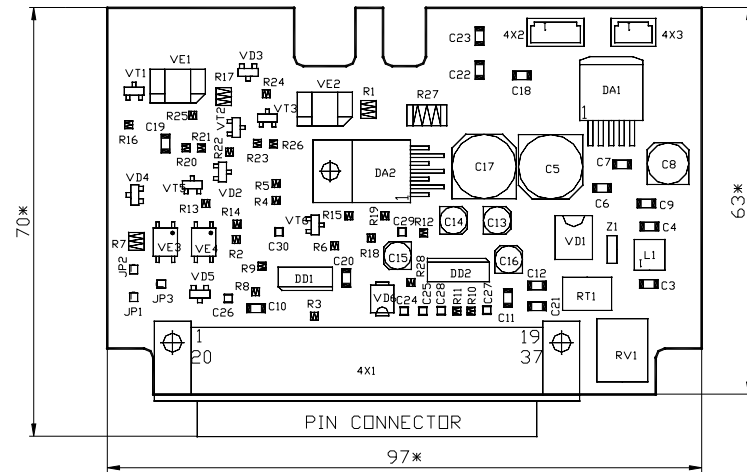
I.C.'s	
m172	DA1
m192	DA2
212	DD1
Inductance	
m1357	L1
Resistors	
m1079	R1, R18
m1080	R10
m1067	R28
m1022	R2, R15
1060	R3, R16
1056	R4, R8, R9, R11
m1014	R14
1053	R12, R13, R17
1050	R19, R20, R22
1046	R21
1048	R23
1044	R5, R24
1054	R25, R26
m1016	R27
Semiconductors	
m657	RT1
m656	RV1
m662	VD1
705	VD3, VD4, VD5, VD9
m159	VD6
m181	VD7
807	VE1, VE2
m817	VE3, VE4
m816	VE5
m667	VT4, VT5, VT8
m655	VT1, VT2
603	VT6, VT7
Filters	
m1352	Z1
Connectors	
m1135	4X1
m1159	4X2
m1194	4X3

5. 0405041
 Power Interface Board.
 CCNET (12V), MEI RS232,
 ID-062 Interfaces.
 Schematic Diagram.



VARIABLE PARTS

PART	JP1	JP2	JP3
0405041	PRESENT	ABSENT	PRESENT
0405041 - 01	ABSENT	PRESENT	ABSENT

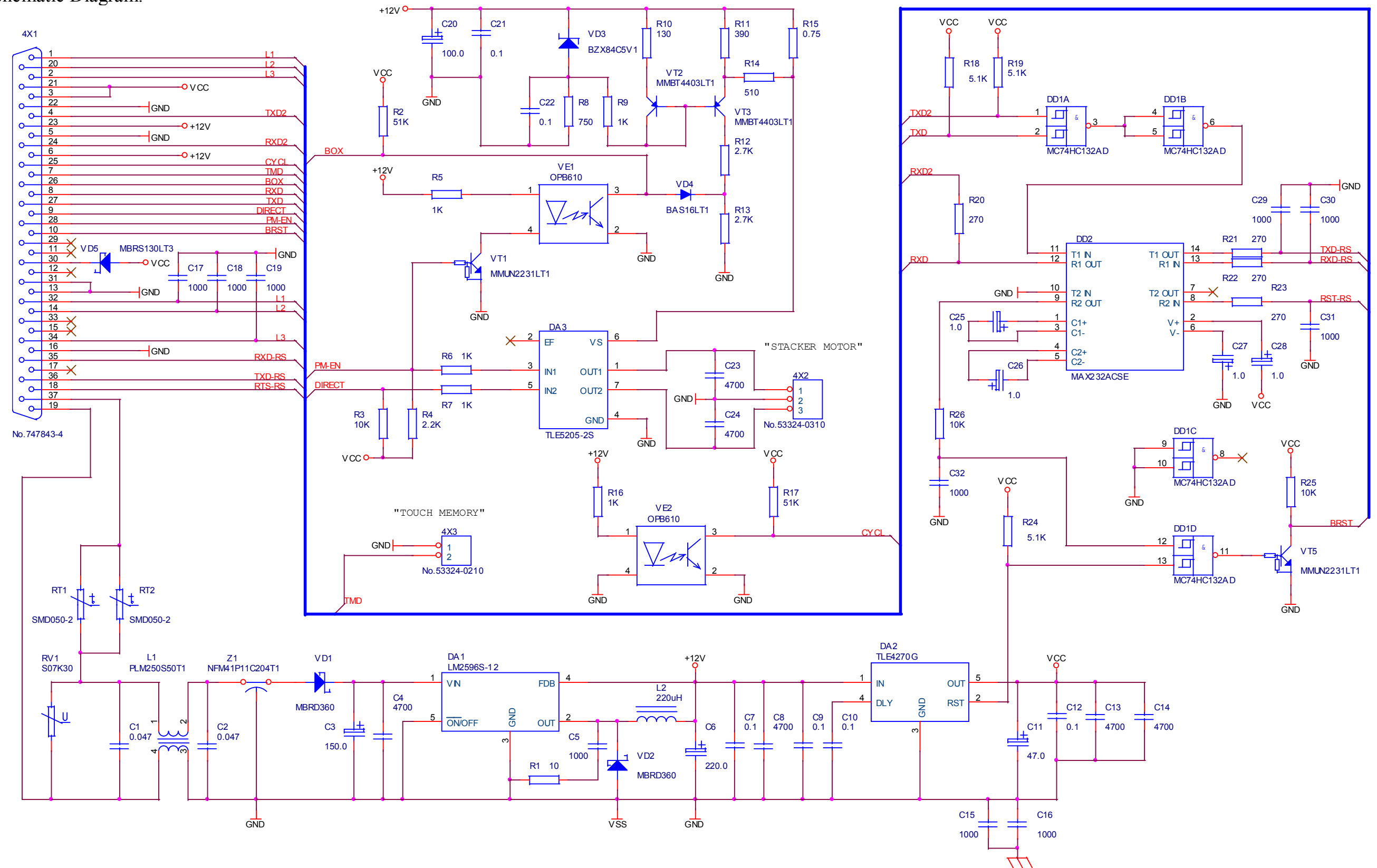
5.1 0405041, Assembly Drawing.

5.2 0405041, Bill of Materials.

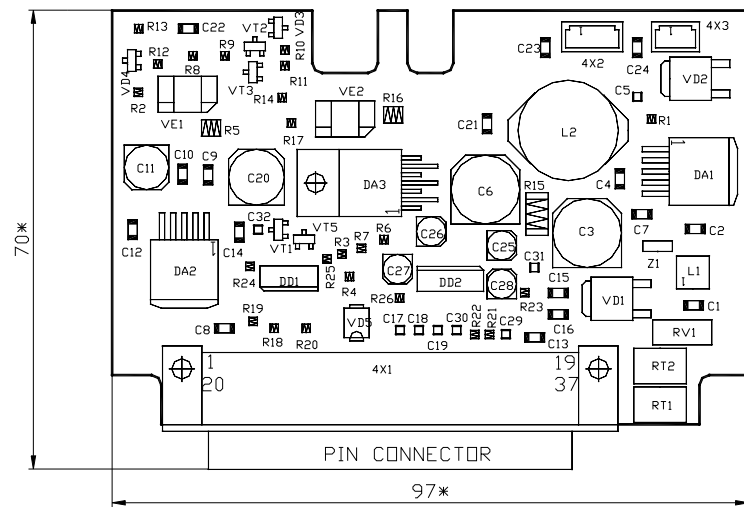
Components and Others Parts	
Capacitors	
970a	C3, C4, C6, C7, C9, C18, C19
949	C24, C25, C26, C27, C28, C29, C30
952	C10, C11, C20, C22, C23
m923	C12, C21
m907	C8
m911	C5, C17
m909	C13, C14, C15,

I.C.'s	
m172	DA1
m192	DA2
212	DD1
m195	DD2
Inductance	
m1357	L1
Resistors	
1048	R22
m1014	R3, R10, R11, R12, R13
1044	R23
m1016	R26
1046	R20
1050	R18, R19, R21
1053	R16
1054	R24, R25
1056	R5, R6, R9
1060	R4, R15, R28
1061	R8
1064	R2, R14
m1080	R7
m1079	R1, R17
m1067	R27
m657	RT1
m656	RV1
Semiconductors	
m662	VD1
m181	VD2
705	VD3, VD4, VD5
m658	VD6
807	VE1, VE2
m816	VE3, VE4
m667	VT1, VT4, VT6
m655	VT5
603	VT2, VT3

Filters	
m1352	Z1
Connectors	
m1135	4X1
m1159	4X2
m1194	4X3
Implementations	
0405041	
1030	JP1, JP3
0405041-01	
1030	JP2

6. 0405045
 Power Interface Board,
 CCNET Interface (24V).
 Schematic Diagram.

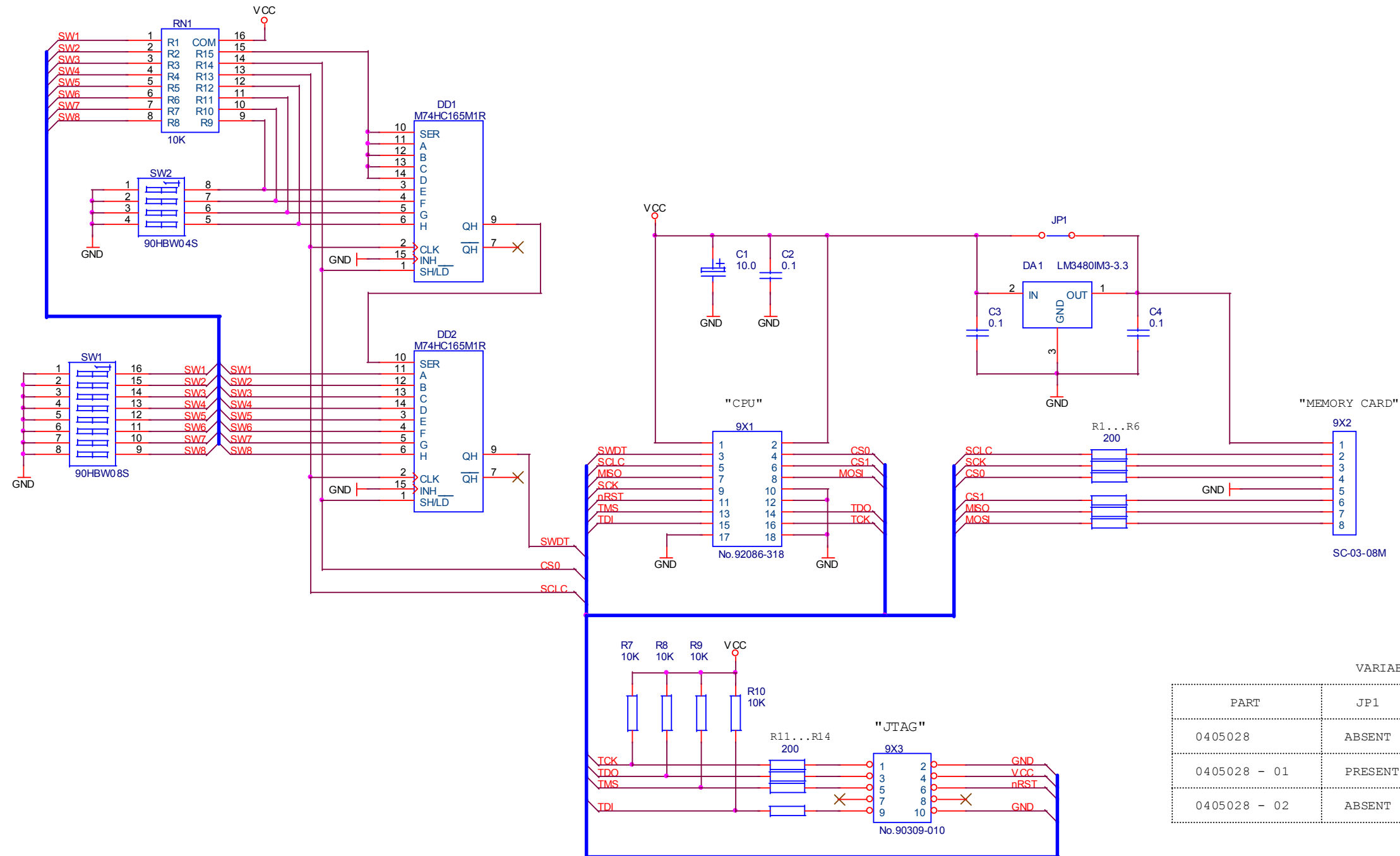


6.1 0405045, Assembly Drawing.

6.2 0405045, Bill of Materials.

Components and Others Parts	
Capacitors	
970a	C7, C9, C10, C12, C21, C22
952	C4, C8, C13, C14, C23, C24
949	C5, C17, C18, C19, C29, C30, C31, C32
m923	C15, C16
981	C1, C2
m911	C6
m910	C3
m907	C11
m908	C20
m909	C25, C26, C27, C28

I.C.'s	
m171	DA1
m172	DA2
m192	DA3
212	DD1
m195	DD2
Inductance	
m1357	L1
m1388	L2
Resistors	
m1079	R5, R16
m1016	R14
m1067	R15
m1022	R2, R17
1060	R3, R25, R26
1056	R18, R19, R24
m1014	R20, R21, R22, R23
1053	R4
1050	R6, R7, R9
1046	R8
1048	R10
1044	R11
1054	R12, R13
m1049	R1
Semiconductors	
m653	RT1, RT2
770	RV1
700	VD1, VD2
705	VD4
m181	VD3
m658	VD5
807	VE1, VE2
m667	VT1, VT5
603	VT2, VT3
Filters	
m1352	Z1
Connectors	
m1135	4X1
m1159	4X2
m1194	4X3

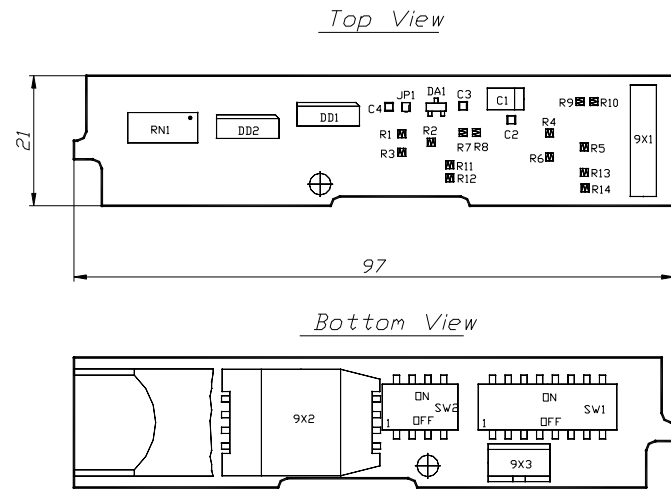
7. 0405028
Download Board.
Schematic Diagram.



VARIABLE PARTS

PART	JP1	DA1	R7...R14, 9X3
0405028	ABSENT	PRESENT	ABSENT
0405028 - 01	PRESENT	ABSENT	ABSENT
0405028 - 02	ABSENT	PRESENT	PRESENT

7.1 0405028, Assembly Drawing.

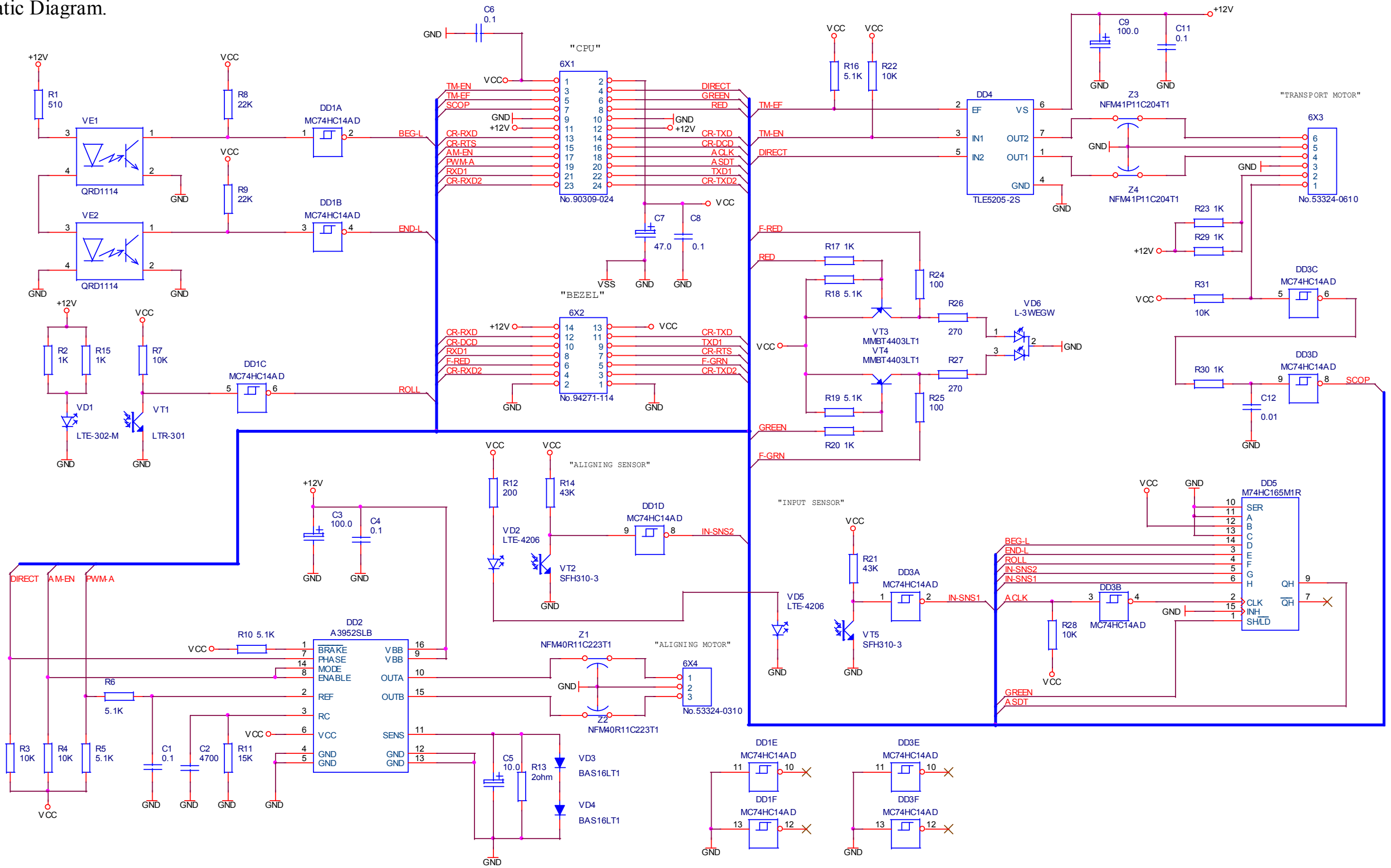


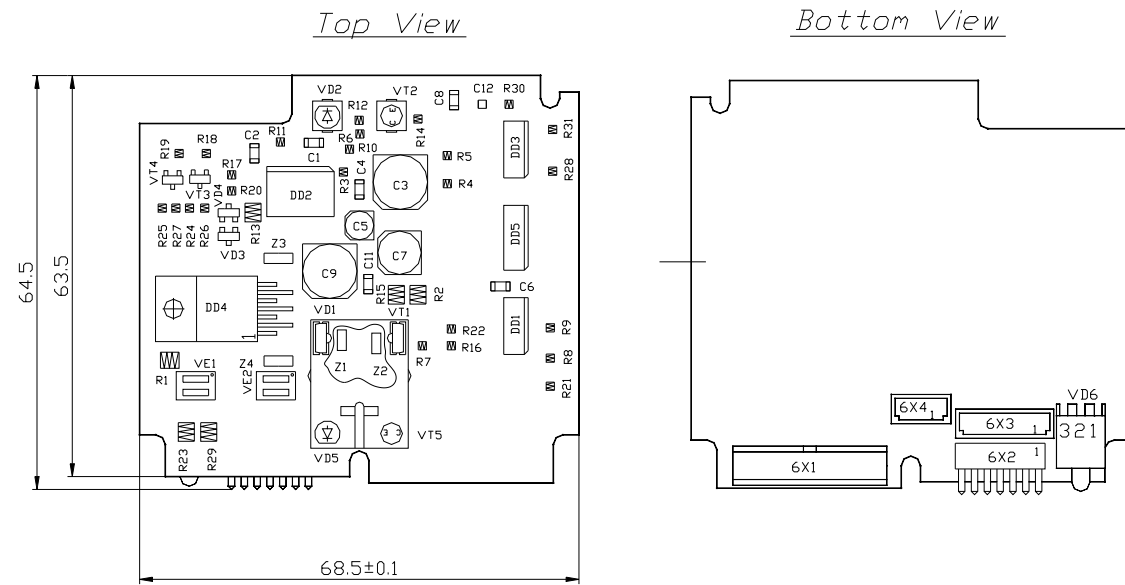
7.2 0405028, Bill of Materials.

Components and Others Parts	
Capacitors	
980	C1
m970	C2, C3, C4

I.C.'s	
m185	DD1, DD2
Resistors	
1080	RN1
1041	R1...R6
Switches	
m1201	SW1
m1200	SW2
Connectors	
m1205	9X1
m1202	9X2
Implementations	
1.1.1.1 0405028	
m207	DA1
0405028-01	
1030	JP1
0405028-02	
m207	DA1
1041	R11...R14
1060	R7...R10
m1155	9X3

8. 0402018
 Input Sensor Board
 With aligning Unit circuits.
 Schematic Diagram.

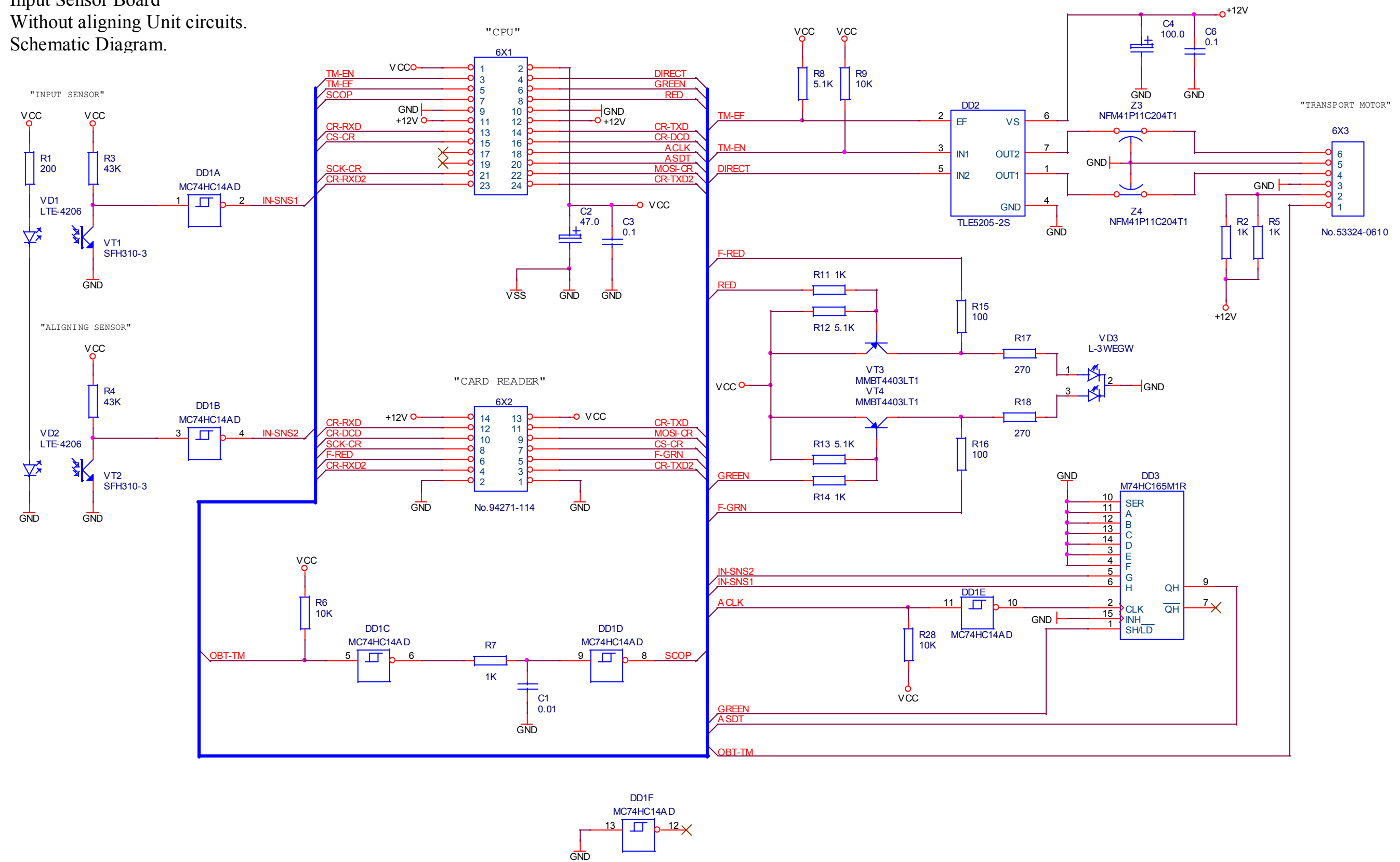


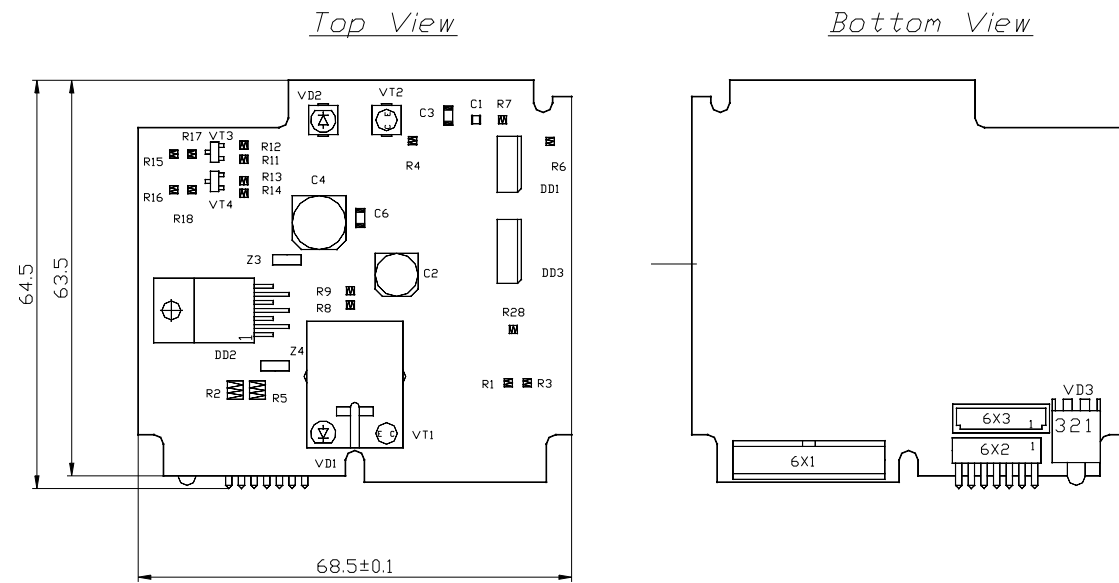
8.1 0402018, Assembly Drawing.

8.2 0402018, Bill of Materials.

Components and Others Parts	
Capacitors	
970a	C1, C4, C6, C8, C11
952	C2
960	C12
m908	C3, C9
m906	C5
m907	C7

I.C.'s	
214	DD1, DD3
m166	DD2
m192	DD4
m185	DD5
Resistors	
m1080	R1
m1079	R2, R15, R23, R29
1060	R3, R4, R7, R22, R28, R31
1056	R5, R6, R10, R16, R18, R19
m1021	R8, R9
1068	R11
1041	R12
m1078	R13
1067	R14, R21
1050	R17, R20, R30
1039	R24, R25
m1014	R26, R27
Semiconductors	
814a	VD1
810	VD2, VD5
705	VD3, VD4
m859	VD6
m874	VE1, VE2
815a	VT1
822	VT2, VT5
603	VT3, VT4
Filters	
m1351	Z1, Z2
m1352	Z3, Z4
Connectors	
m1139	6X1
m1209	6X2
m1195	6X3
m1159	6X4

9. 0402019
 Input Sensor Board
 Without aligning Unit circuits.
 Schematic Diagram.

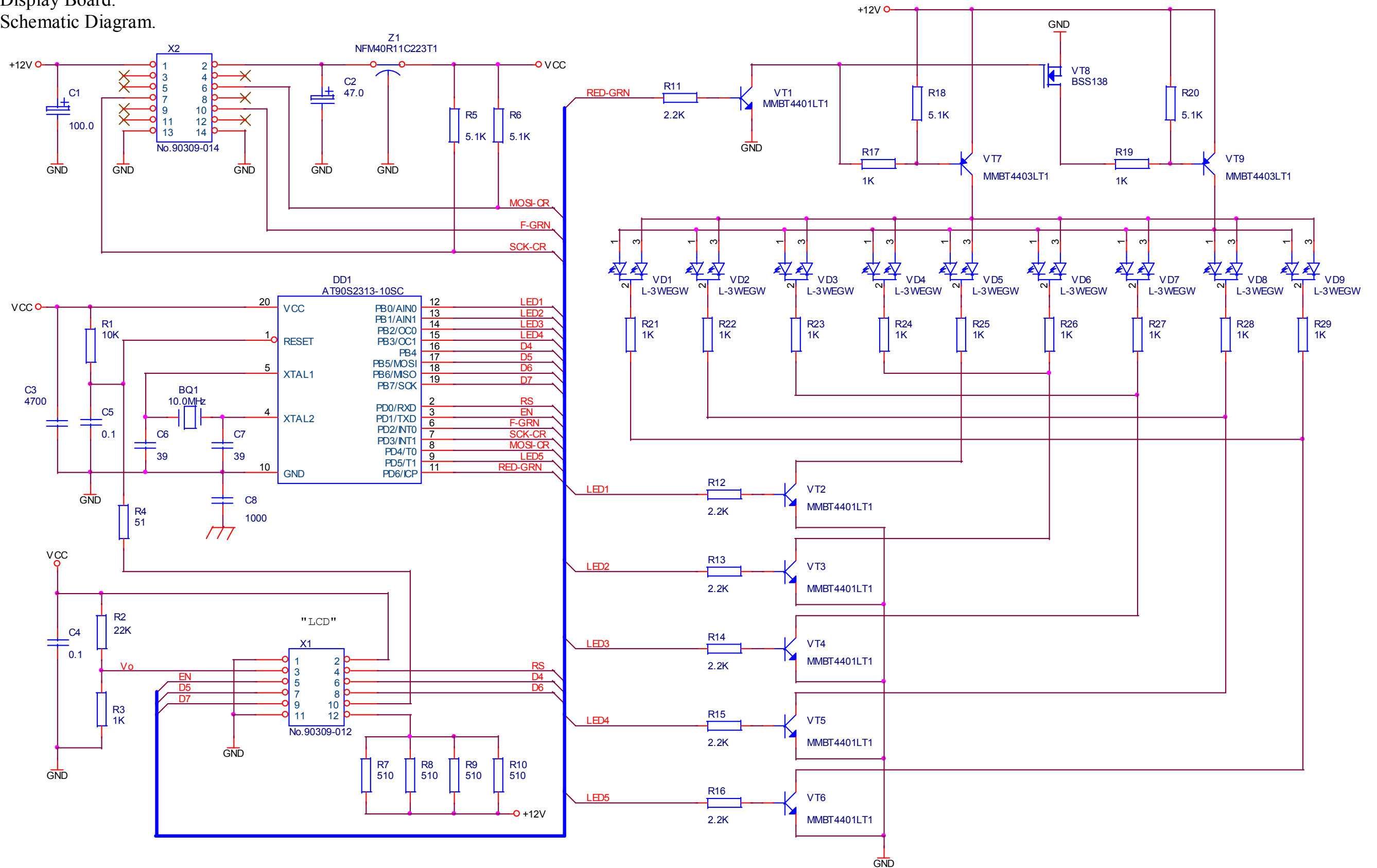


9.1 0402019, Assembly Drawing.

9.2 0402019, Bill of Materials.

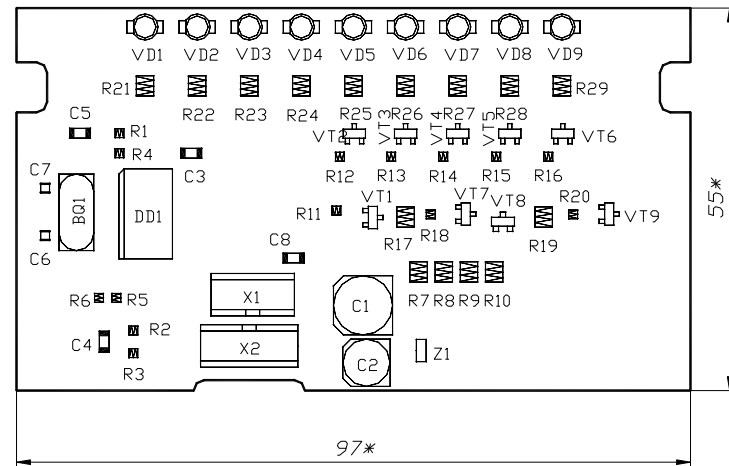
Components and Others Parts	
Capacitors	
970a	C3,C6
960	C1
m907	C2
	C4

I.C.'s	
m192	DD2
214	DD1
206	DD3
Resistors	
1039	R16,R15
1041	R1
m1014	R17,R18
1050	R7,R11,R14
1056	R8,R12,R13
1060	R6,R9,R28
1067	R3,R4
1051	R2,R5
Semiconductors	
m859	VD3
810	VD1, VD2
822	VT1,VT2
603	VT3,VT4
Filters	
m1352	Z3,Z4
Connectors	
m1139	6X1
m1209	6X2
m1195	6X3

10. 0404013
Display Board.
Schematic Diagram.



10.1 0404013, Assembly Drawing.

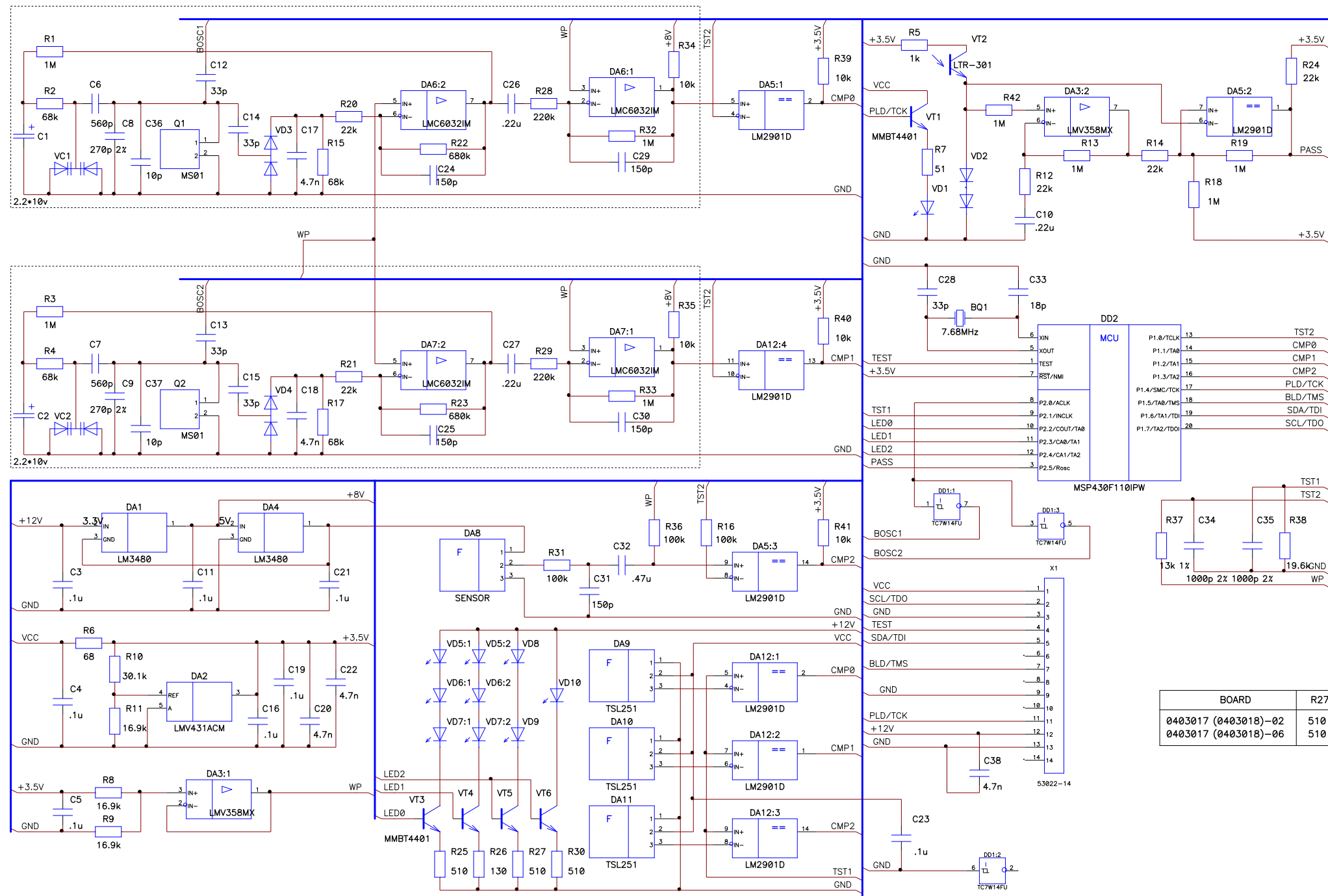


I.C.'s	
m33	DD1
Resistors	
1047	R4
1050	R3
1056	R5,R6,R18,R20
1060	R1
m1021	R2
1053	R11...R16
m1079	R17,R19,R21...R29
m1080	R7...R10
Semiconductors	
603	VT7,VT9
601	VT8
m859	VD1...VD9
602	VT1...VT6
Connectors	
m1174	X1
m1198	X2
Filters	
m1351	Z1

10.2 0404013, B

Components and Others Parts	
Quartz Crystal	
m1256	BQ1
Capacitors	
m907	C2
m908	C1
970a	C4,C5
931	C6,C7
952	C3
m923	C8

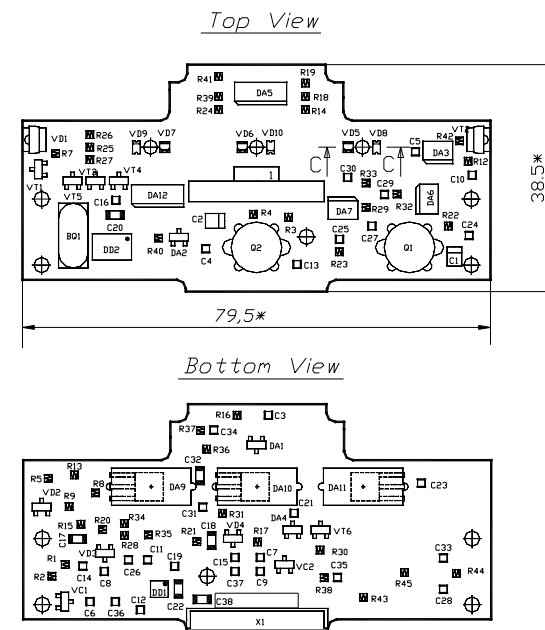
11. 0403017
Magnetic Sensor Board.
Schematic Diagram.



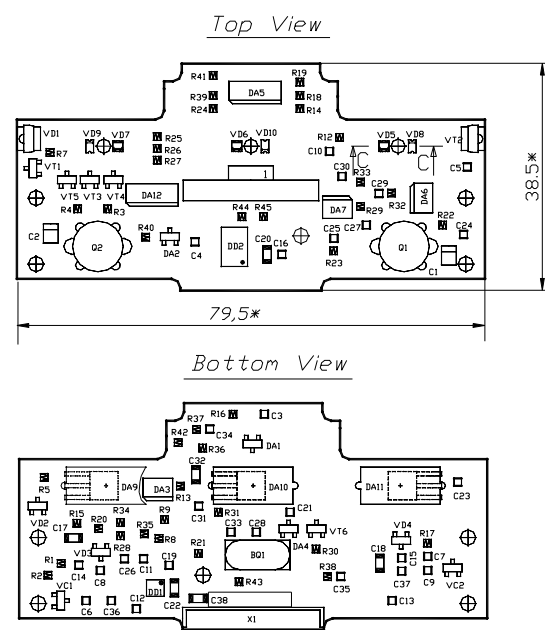
Power Table				
Ref Des	Device(Type)	Package	GND	+8V/+3.5V
DA3	LMV358MX	SO-8	4	8
DA5	LM2901D	SO-14	12	3
DA6	LMC6032IM	SO-8	4	8
DA7	LMC6032IM	SO-8	4	8
DA12	LM2901D	SO-14	12	3
DD1	TC7W14FU	SSOP8-P-0.65	4	8
DD2	MSP430F1101PW	SSOP20	4	2

BOARD	R27	R30	VD8,VD9	VD10	VT5	VT6	DA8
0403017 (0403018)-02	510	510	FRED	FRED	YES	YES	YES
0403017 (0403018)-06	510	130	FRED	ORNG	YES	YES	YES

11.1 0404017, Assembly Drawing.



11.2 0404018, Assembly Drawing.

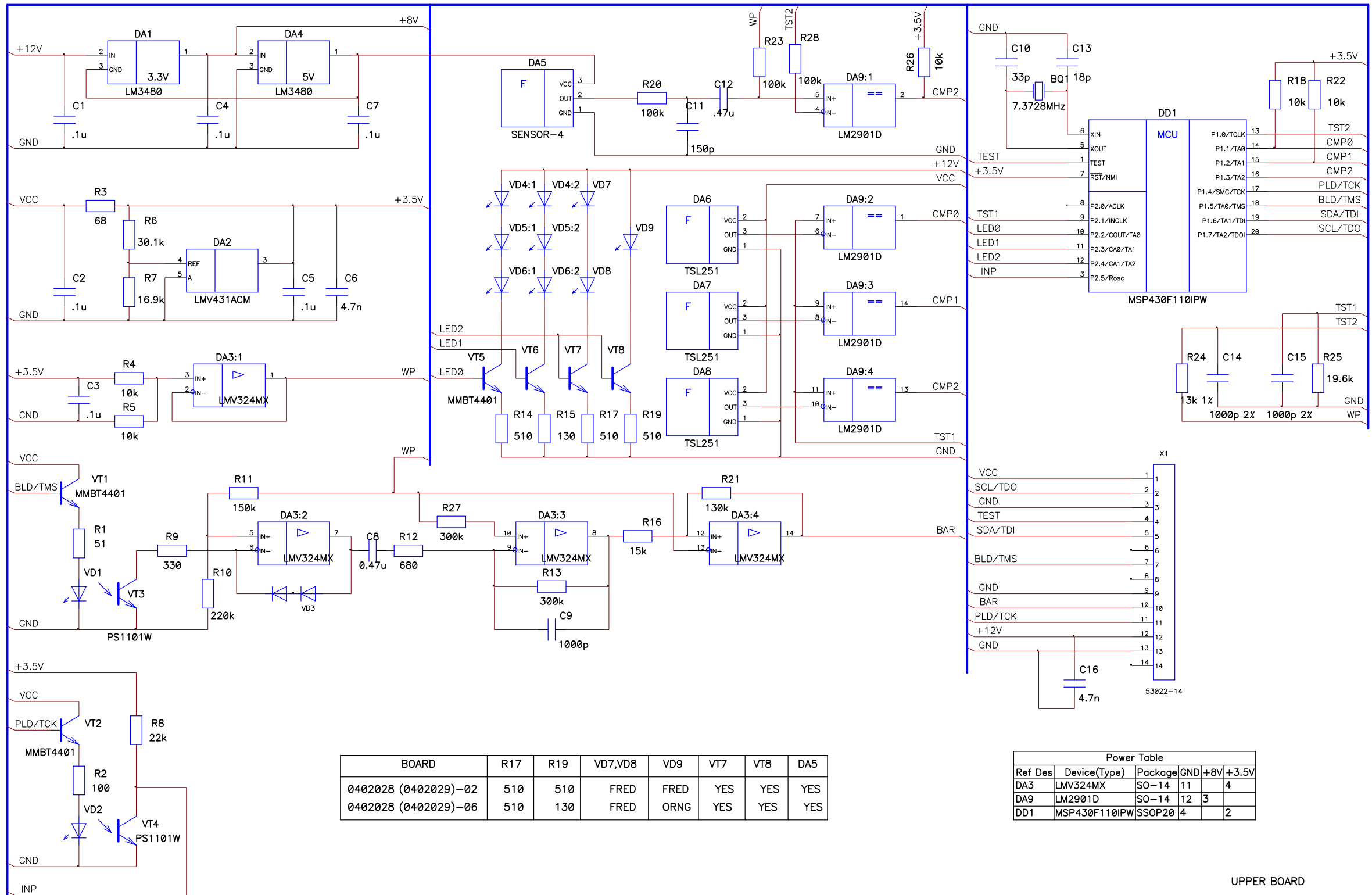


11.3 0404017, Bill of Materials.

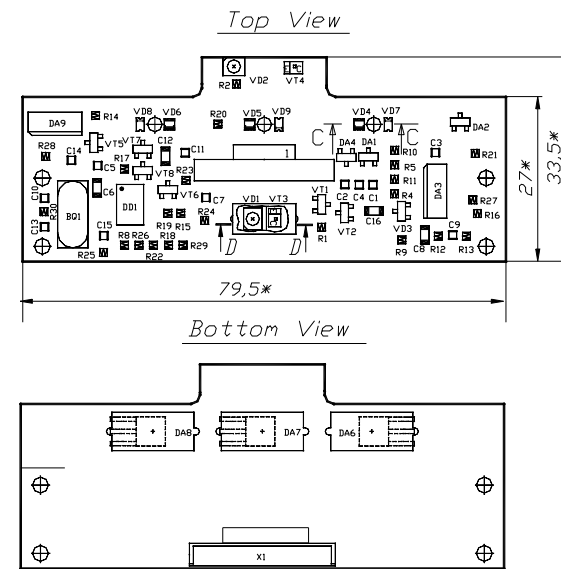
Parts	
m1353a	Q1, Q2
Components and Others Parts	
Quartz Crystal	
m1261	BQ1
Capacitors	
m999	C1, C2
m970	C3, C4, C5, C11, C16, C19, C21, C23
m916	C6, C7
995	C8, C9
m990	C12, C13, C14, C15
930	C28, C33
m994	C24, C25, C29, C30, C31
952	C17, C18, C20, C22, C38
m971	C10, C26, C27
m979	C34, C35
m938a	C36, C37
m998	C32
I.C.'s	
m207	DA1, DA2
m206	DA3
m219	DA4
m665	DA5, DA12
m168b	DA6, DA7
821	DA9, DA10, DA11
m216	DD1
m218	DD2

Resistors	
1070	R1, R3, R13, R18, R19, R32, R33, R42
1072	R2, R4, R15, R17
1050	R5
1053	R43, R45
1047	R7
m1062	R8, R9
1069	R12, R14, R20, R21, R24
m1072	R22, R23
1045	R25
1048	R26
1066	R28, R29, R44
1060	R34, R35, R39, R40, R41
m1023	R16, R31, R36
R1534	R37
R1533	R38
Semiconductors	
m651	VC1, VC2
m668	VD2
m664	VD3, VD4
814a	VD1
m872	VD5, VD6, VD7
602	VT1, VT3, VT4
815a	VT2
Connectors	
m1196	X1
Implementations	
0403017-02	
0405017	DA8
1045	R27, R30
m864	VD8, VD9, VD10
602	VT5, VT6
0403017-06	
0405017	DA8
1045	R27
1048	R30
m864	VD8, VD9
m865	VD10
602	VT5, VT6

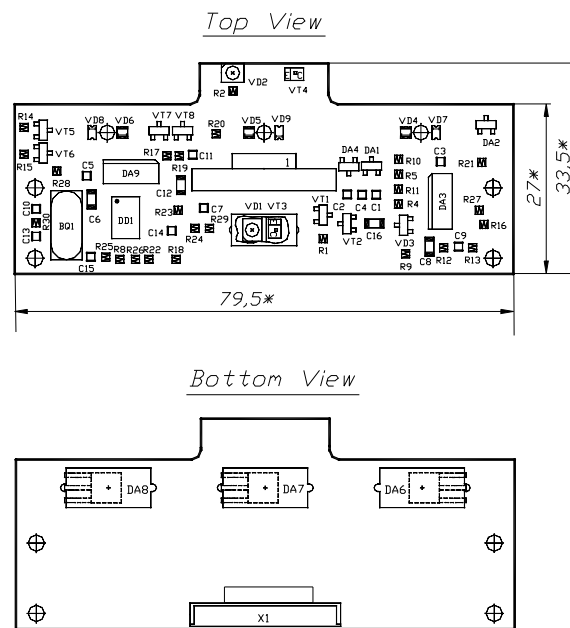
12. 0402028
Optic Sensor Board.
Schematic Diagram.



12.1 0402028, Assembly Drawing.



12.2 0402028, Assembly Drawing.



12.3 0402028, Bill of Materials.

Parts	
Components and Others Parts	
Quartz Crystal	
m1263	BQ1
Capacitors	
m970	C1, C2, C3, C4, C5, C7
952	C6, C16
m994	C11
930	C10, C13
m979	C9, C14, C15
m998	C8, C12
I.C.'s	
m207	DA1, DA2
m205	DA3
m219	DA4
821	DA6, DA7, DA8
m665	DA9
m218	DD1
Resistors	
1047	R1
1039	R2
1060	R18, R22, R26
1068	R16
1069	R8
m1052	R9
m1077	R12
1066	R10, R30
m1076	R11
m1075	R21
1045	R14
1053	R29
1048	R15
m1025	R13, R27
m1023	R20, R23, R28
m1062	R4, R5
m1044	R24
m1005	R25

Semiconductors	
m851	VD2
R1509	VD1
m668	VD3
m872	VD4, VD5, VD6
602	VT1, VT2, VT5, VT6
m854	VT3, VT4
Connectors	
m1196	X1
Implementations	
040228-02	
0405012	DA5
1045	R17, R19
m864	VD7, VD8, VD9
602	VT7, VT8
040228-06	
0405012	DA5
1045	R17
1048	R19
m864	VD7, VD8
m865	VD9
602	VT7, VT8