

Component list

Bill of Materials

CESA Project:

NIPSE HOR EMA

Board:

ControlBoard

CESA Part Number:

CE900701-0001

Modification No.

MXXXXXX

Revision:

A



COMPAÑIA ESPAÑOLA DE SISTEMAS AERONAUTICOS S.A.

Report Date: 05/05/2017 12:07:03

Item	Designator	Value	Rated Voltage	Power	Tolerance	PartNumber	Description	Footprint	Manufacturer
1	1, 2, 3, 4							PAD	
2	C1, C5, C6, C7, C11, C12, C13	100nF	50 V		5%	08055C104JAT2A	Capacitor	0805C	AVX
3	C2, C3, C4	4.7uF	50V		10%	12065C475KAT4A	Capacitor	1206C	AVX
4	C8, C9, C10	220uF	50 V		20%	EEEEFK1H221P	Electrolytic Capacitor	Cap_EEEFK1H221P	Panasonic
5	C14, C20, C44	100nF	50 V		5%	06035C104JAT2A	Capacitor SMD	0603C	AVX
6	C15, C16, C26, C30, C32, C33, C35, C36, C37, C38, C46, C47	100nF	25 V		5%	06033C104JAT2A	Capacitor	0603C	AVX
7	C17	10nF	25 V		5%	06033C103JAT2A	Capacitor SMD	0603C	AVX
8	C18, C21, C22	N/A					Capacitor	0603C	
9	C19	10uF	25 V		10%	C2012X5R1E106K085AC	Capacitor SMD	0805C	TDK
10	C23	470nF	25 V		10%	06033C474KAT2A	Capacitor	0603C	AVX
11	C24	100pF	25 V		5%	06033A101JAT2A	Capacitor	0603C	AVX
12	C25, C34, C39	1uF	25 V		10%	06033C105KAT2A	Capacitor	0603C	AVX
13	C27	470pF	25 V		5%	VJ0805A471JXXPW1BC	Capacitor SMD	0603C	Vishay
14	C28	56nF	25 V		5%	VJ0805Y563JXXPW1BC	Capacitor SMD	0603C	Vishay
15	C29	10uF	50 V		10%	C3216X5R1H106K160AB	Capacitor	1206C	TDK
16	C31	100nF	100 V		5%	C0805C104J1RACTU	Capacitor SMD	0805C	KEMET
17	C40	1nF	50 V		5%	C0603C102J2GCAUTO	Capacitor SMD	0603C	KEMET
18	C41	4.7uF	25 V		10%	C1608X5R1E475K080AC	Capacitor	0603C	TDK
19	C42	1uF	25 V		5%	08053C105JAT2A	Capacitor SMD	0805C	AVX
20	C43	2.7nF	50 V		5%	08055A272JAT2A	Capacitor SMD	0805C	AVX
21	C45	2.2uF	25 V		10%	C1608X5R1E225K080AB	Capacitor	0603C	TDK

22	C48	8.2nF	25 V		5%	C1608C0G1E822J080AA	Capacitor SMD	0603C	TDK
23	C49, C50	1.5uF	50 V		10%	C2012X7R1H155K125AC	Capacitor	0805C	TDK
24	CX1, R13, R14, R15	0		0.1 W	1%	CRCW06030000Z0EA	Resistor	0603	Vishay
25	D1	10 V				MMSZ4697T1G	Zener Diode SMD 4.7V	Zener_MMSZ4688T1G	ON Semiconductor
26	D2	Green				LTST-C171GKT	LED, Green, SMD	LED_LTST-C171	Lite-On
27	D3	12 V				MMSZ4699T1G	Zener Diode SMD 4.7V	Zener_MMSZ4688T1G	ON Semiconductor
28	D4	Red				LTST-C170KRKT	LED, Red, SMD	LED_LTST-C170	Lite-On
29	D5, D11, D12	4.7 V				MMSZ4688T1G	Zener Diode 4.7V	Zener_MMSZ4688T1G	ON Semiconductor
30	D6, D13, D14					BAS16	Diode	SOT23-3 - DIODE	Vishay
31	D7, D9	White				LTW-170ZDC	LED, Red, SMD	LED_LTST-C170	Lite-On
32	D8	Blue Clear				LTST-C170TBKT	LED, Green, SMD	LED_LTST-C171	Lite-On
33	D10					STPS30M60DJF	Diode	PowerFLAT 5x6	STMicroelectronics
34	L1	10uH				TCK-047	Inductor	Coil TDK-047	TRACO Power
35	L2	8.2uH				XAL1010-822ME_	Inductor	XAL1010_	Coilcraft
36	P1, P4					282834-3	Terminal Block, 3x1, 5.08 mm, TH	Conn_3P_2.54mm	TE Connectivity
37	P2, R8					282834-2	Terminal Block, 2x1, 5.08mm, TH	Conn_2P_2.54mm	TE Connectivity
38	P3					282834-5	Connector	Conn_5P_2.54mm	TE Connectivity
39	Q1, Q4, Q5, Q6, Q8, Q9, Q10, Q11, Q12					TPH4R50ANH	MOSFET-N	TPH2R306NH_SOIC-8	Toshiba
40	Q2, Q3, Q15, Q16, Q17, Q18					MMBT222A	NPN General Purpose Amplifier	SOT23-3	Fairchild
41	Q7, Q13					NVMFS5113PL	P-Channel MOSFET	SO8FL (DFN-5)	On Semiconductor
42	Q14					MMBT3906	PNP Bipolar Transistor	SOT23-3	Fairchild
43	R1, R2, R3, R4, R5, R6	5.1		0.25 W	1%	CRCW12065R10FNEA	Resistor	1206R	Vishay
44	R7	0.025		3 W	1%	CRA2512-FZ-R025ELF	Resistor	2512	Bourns
45	R9, R16, R27, R40, R56, R58, R63, R71, R73	3K		0.1 W	1%	CRCW06033K00FKEB	Resistor	0603	Vishay
46	R10	120K		0.1 W	1%	CRCW0603120KFKEB	Resistor	0603	Vishay
47	R11	10		0.1 W	1%	CRCW060310R0FKEA	Resistor	0603	Vishay
48	R12	100		1 W	1%	CRCW2010100RFKEFHP	Resistor	2010	Vishay
49	R17	2.1K		0.1 W	1%	CRCW06032K10FKEA	Resistor	0603	Vishay
50	R18	4.99K		0.1 W	1%	CRCW06034K99FKEB	Resistor	0603	Vishay
51	R19	24K		0.1 W	1%	CRCW060324K0FKEA	Resistor	0603	Vishay
52	R20	3.3K		0.1 W	1%	CRCW06033K30FKEB	Resistor	0603	Vishay
53	R21	1.2K		0.1 W	1%	CRCW06031K20FKEA	Resistor	0603	Vishay
54	R22	97.6K		0.1 W	1%	CRCW060397K6FKEA	Resistor	0603	Vishay
55	R23	31.6K		0.1 W	1%	CRCW060331K6FKEA	Resistor	0603	Vishay
56	R24, R29, R30, R37	N/A					Resistor	0603	

57	R25	100K		0.125 W	1%	CRCW0805100KFKEA	Resistor	0805R	Vishay
58	R26	10K		0.125 W	1%	CRCW080510K0FKEA	Resistor	0805R	Vishay
59	R28	18K		0.1 W	1%	CRCW060318K0FKEA	Resistor	0603	Vishay
60	R31, R32, R60, R62, R72, R75	10K		0.1 W	1%	CRCW060310K0FKEA	Resistor	0603	Vishay
61	R33	69.8K		0.1 W	1%	CRCW060369K8FKEA	Resistor	0603	Vishay
62	R34	12.4K		0.1 W	1%	CRCW060312K4FKEA	Resistor	0603	Vishay
63	R35	768K		0.1 W	1%	CRCW0603768KFKEA	Resistor	0603	Vishay
64	R36, R61	1M		0.1 W	1%	CRCW06031M00FKEA	Resistor	0603	Vishay
65	R38	1.5K		0.1 W	1%	CRCW06031K50FKEA	Resistor	0603	Vishay
66	R39	523K		0.1 W	1%	CRCW0603523KFKEA	Resistor	0603	Vishay
67	R41, R46, R49, R77	1K		0.1 W	1%	CRCW06031K00FKEA	Resistor	0603	Vishay
68	R42	205K		0.1 W	1%	CRCW0603205KFKEA	Resistor	0603	Vishay
69	R43	6.8K		0.1 W	1%	CRCW06036K80FKEA	Resistor	0603	Vishay
70	R44	14K		0.1 W	1%	CRCW060314K0FKEA	Resistor	0603	Vishay
71	R45	100K		0.1 W	1%	CRCW0603100KFKEA	Resistor	0603	Vishay
72	R47	75K		0.1 W	1%	CRCW0603240KFKEA	Resistor	0603	Vishay
73	R48	330		0.1 W	1%	CRCW0603330RFKEA	Resistor	0603	Vishay
74	R50	2K		0.1 W	1%	CRCW06032K00FKEA	Resistor	0603	Vishay
75	R51	10		0.25 W	1%	CRCW120610R0FKEA	Resistor	1206R	Vishay
76	R52	0.025		2 W	1%	WSL2512R0250FEA18	Resistor	2512	Vishay
77	R53	100		0.125 W	1%	CRCW0805100RFKEA	Resistor	0805R	Vishay
78	R54, R65	15K		0.1 W	1%	CRCW060315K0FKEA	Resistor	0603	Vishay
79	R55	75		0.1 W	1%	CRCW060375R0FKEA	Resistor	0603	Vishay
80	R57	6.04K		0.1 W	1%	CRCW06036K04FKEA	Resistor	0603	Vishay
81	R59	22.6K		0.1 W	1%	CRCW060322K6FKEA	Resistor	0603	Vishay
82	R64	698		0.1 W	1%	CRCW0603698RFKEA	Resistor	0603	Vishay
83	R66, R67	30K		0.1 W	1%	CRCW060330K0FKEA	Resistor	0603	Vishay
84	R68	392K		0.1 W	1%	CRCW0603392KFKEA	Resistor	0603	Vishay
85	R69	820		0.1 W	1%	CRCW0603820RFKEA	Resistor	0603	Vishay
86	R70	54.9K		0.125 W	1%	CRCW080554K9FKEA	Resistor	0805R	Vishay
87	R74	182K		0.1 W	5%	CRCW0603182KFKEA	Resistor	0603	Vishay
88	R76	768		0.1 W	1%	CRCW0603768RFKEA	Resistor	0603	Vishay
89	R78, R83	4.53K		0.125 W	1%	CRCW08054K53FKEA	Resistor	0805R	Vishay
90	R79, R82	5.23K		0.125 W	1%	CRCW08055K23FKEA	Resistor	0805R	Vishay
91	R80, R81	6.04K		0.125 W	1%	CRCW08056K04FKEA	Resistor	0805R	Vishay
92	TP1, TP27, TP28					N/A	Test Point	TP	N/A

93	TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP24, TP25, TP26, TP29, TP30, TP31, TP32, TP33, TP34, TP35, TP36, TP37, TP38, TP39, TP40, TP41, TP42					N/A	Test Point	TP2	N/A
94	U1	0.5A				TSR 0.5-2415		TRACO TSR 0.5-2415	TRACO Power
95	U2, U3, U4	3A				UCC27200QDDARQ1	Gate Driver UCC27200	SOIC-8	Texas Instruments
96	U5					OPA2172-Q1	AOP	VSSOP(8) Wide TI -	Texas Instruments
97	U6	5V				SPX3819M5-L	Voltage Regulator +5V 500mA	SOT23-5	EXAR
98	U7, U8					SN74LVC2G08DCTR	2x AND Gate	SM8 TI	Texas Instruments
99	U9					SN74LVC1G86DBV	1x XOR Gate	SOT23-5	Texas Instruments
100	U10, U15					SN74LVC2G14DBVR	Schmitt Trigger Inverter	SOT23_6P	Texas Instruments
101	U11	4.096V				LM4128AQ1MF4.1/NOPB	REF_enable	SOT23-5	Texas Instruments
102	U12, U13					OPA2172QDGKRQ1	AOP	VSSOP(8) Wide TI -	Texas Instruments
103	U14					SN74LVC1G175SDBV	Single Positive-Edge-Triggered D-Type Flip-Flop With Asynchronous Clear	SOT23_6P	Texas Instruments
104	U16					TLV3502AQDCNRQ1	AOP	SOT23-8	Texas Instruments
105	U17					REF3325AIDBZR	REF: 2,5V	SOT23-3	Texas Instruments
106	U18, U23					LTC6994IS6-1	Delay LTC6994HS6-1	TSOT23_6P	Linear Technology
107	U19					TS3021HIYLT	1x AOP SOT23	SOT23-5	STMicroelectronics
108	U20					ACS714LLCTR-20A-T		SOIC-8	Allegro
109	U21					DRV8307RHAT	Motor Driver	RHA0040A	Texas Instruments
110	U22					LM5022QDGSRQ1	Boost & SEPIC regulator	MSOP-10	Texas Instruments