

# PART LIST OF SEMICONDUCTOR OR ACTIVE CIRCUIT DEVICE

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1. NTE-182 AIS TRANSPONDER

1.1 CAG-2180 LNA UNIT

IC1	IC	NJG1103F1-TE1
IC2	IC	NJG1103F1-TE1

1.2 CMN-2182 TRX UNIT

AR101	Arrester	SD4-200
AR102	Arrester	SD4-200
CD1	Diode	1SV214
CD101	Diode	MA2J728
CD102	Diode	MA2J728
CD103	Diode	UM9401F
CD104	Diode	1SS184
CD105	Diode	UM9401F
CD106	Diode	UM9401F
CD107	Diode	UM9401F
CD108	Diode	UM9401F
CD201	Diode	1SV305
CD301	Diode	1SV214
CD302	Diode	1SS315
CD401	Diode	1SS356
CD402	Diode	1SS315
CD403	Diode	1SS356
CD404	Diode	1SS315
CD405	Diode	1SS315
CD406	Diode	1SS356
CD407	Diode	1SS356
CD408	Diode	1SS315
CD501	Diode	1SS356
CD502	Diode	1SS315
CD503	Diode	1SS356
CD504	Diode	1SS315
CD505	Diode	1SS315
CD506	Diode	1SS356
CD507	Diode	1SS315
CD508	Diode	1SS356
CD701	Diode	1SV228
CD702	Diode	1SV228
CD801	Diode	1SV228
CD802	Diode	1SV228
IC101	IC	RA35H1516M
IC102	IC	NJM3404AV
IC103	IC	NJM3404AV
IC201	IC	UPB1509
IC301	IC	NJM3404AV
IC302	IC	NJM3404AV
IC303	IC	NJM3404AV
IC401	IC	TA31137FN_EL
IC501	IC	TA31137FN_EL
IC601	IC	TA31137FN_EL

IC701	IC	MB1511PFV
IC801	IC	MB1511PFV
IC1001	IC	LM2937ES-8.0
IC1002	IC	NJM2370U08
IC1003	IC	NJM78M05DL1A
IC1004	IC	NJM2860F3-33
IC1005	IC	NJM2380U05
MIX201	Mixer	ADE-2
MIX601	Mixer	ADE-2
TR1	Transistor	2SK1830
TR2	Transistor	2SC4116GR
TR51	Transistor	2SC5337QR
TR101	Transistor	2SC3357
TR102	Transistor	2SC5337QR
TR104	Transistor	2SJ574
TR105	Transistor	RN1102FT
TR106	Transistor	RN1102FT
TR107	Transistor	2SJ574
TR108	Transistor	RN1102FT
TR109	Transistor	2SJ574
TR110	Transistor	RN1102FT
TR201	Transistor	RN2102FT
TR202	Transistor	2SC3356
TR203	Transistor	RN1102FT
TR204	Transistor	2SC3356
TR205	Transistor	2SC4116GR
TR206	Transistor	2SC3356
TR207	Transistor	RN2102FT
TR208	Transistor	RN1102FT
TR209	Transistor	2SC3356
TR210	Transistor	2SC3357
TR211	Transistor	2SJ574BP
TR212	Transistor	RN1102FT
TR301	Transistor	2SC3356
TR302	Transistor	2SC3356
TR303	Transistor	2SC4116GR
TR304	Transistor	2SC3356
TR305	Transistor	2SC2714
TR306	Transistor	2SC2714
TR401	Transistor	SST310
TR402	Transistor	2SC3356-T1B
TR403	Transistor	2SC4116GR
TR501	Transistor	SST310
TR502	Transistor	2SC3356-T1B
TR601	Transistor	SST310
TR602	Transistor	SST310
TR603	Transistor	2SC3356-T1B
TR604	Transistor	2SC4116GR
TR605	Transistor	2SC3357
TR701	Transistor	2SC4116GR
TR702	Transistor	RN2102FT

TR703	Transistor	RN1102FT
TR704	Transistor	2SA1162
TR705	Transistor	2SC3356
TR706	Transistor	2SC3356
TR707	Transistor	2SC4116GR
TR708	Transistor	2SC3356
TR709	Transistor	2SC3357
TR710	Transistor	2SC5337
TR801	Transistor	2SC4116GR
TR802	Transistor	RN2102FT
TR803	Transistor	RN1102FT
TR804	Transistor	2SA1162
TR805	Transistor	2SC3356
TR806	Transistor	2SC3356
TR807	Transistor	2SC4116GR
TR808	Transistor	2SC3356
TR809	Transistor	2SC3357
TR810	Transistor	2SC5337
TR901	Transistor	2SC4116GR
TR902	Transistor	2SC4116GR
TR903	Transistor	2SC4116GR
TR1001	Transistor	2SJ574
TR1002	Transistor	RN1102FT
X601	Crystal Oscillator	NX6035SA
XU901	Crystal Oscillator	TTS14VS

1.3 CBD-2182 PS UNIT

AR1	Arrester	SD4-200
AR2	Arrester	CVG30A470M-TW
CD1	Diode	RD10M-T1B B3
CD2	Diode	SFPM-64V
CD3	Diode	1SS184-TE85L
CD4	Diode	1SS184-TE85L
CD5	Diode	1SS184-TE85L
CD6	Diode	RD3.3M-T1B B2
CD7	Diode	1SS184-TE85L
CD8	Diode	RD12M-T1B B3
CD9	Diode	RD12M-T1B B3
CD10	Diode	SPB-G54S-VL
CD11	Diode	SPB-G54S-VL
CD12	Diode	SPB-G54S-VL
CD13	Diode	1SS184-TE85L
IC1	IC	TA78L05F
IC2	IC	NJM2903M-T1
IC3	IC	HA16116FP-EL
IC4	IC	TC7W74FU-TE12L
TR1	Transistor	2SA1162-GR-TE85L
TR2	Transistor	2SB906-Y-LB
TR3	Transistor	2SC2712-YTE85L
TR4	Transistor	2SC2712-YTE85L
TR5	Transistor	2SJ530(S)
TR6	Transistor	2SJ530(S)
TR7	Transistor	2SC2712-YTE85L
TR8	Transistor	2SC2712-YTE85L
TR9	Transistor	2SC2712-YTE85L
TR10	Transistor	2SC2712-YTE85L

## 1.4 CDJ-2282

CONTROL UNIT

CD101	Diode	HSM107S-TL
CD102	Diode	HSM107S-TL
CD103	Diode	HSM107S-TL
CD104	Diode	HSM107S-TL
CD105	Diode	1SS319_TE85L
CD106	Diode	MA728-TX
CD201	Diode	SML-210MT_T86_Green
CD202	Diode	SML-210MT_T86_Green
CD203	Diode	SML-210MT_T86_Green
CD321	Diode	1SS356TW11
CD331	Diode	1SS356TW11
CD341	Diode	1SS356TW11
CD381	Diode	MA728-TX
CD401	Diode	1SS294(TE85L)
CD402	Diode	1SS306-TE85L
CD403	Diode	1SS306-TE85L
CD461	Diode	MA4Z71300L
CD462	Diode	MA4Z71300L
GPS1	Unit	CCA-453JP
IC101	IC	HD64F2328VTE25
IC102	IC	TC55VEM208ASTN55
IC103	IC	MBM29LV004TC-90PTN
IC104	IC	TC7WU04FU-TE12L
IC105	IC	RN5VD28CA-TR
IC201	IC	XC2S300E-6PQ208I
IC202	IC	XC2S300E-6PQ208I
IC203	IC	XC18V02VQ44I
IC204	IC	XC18V02VQ44I
IC301	IC	TLV5606IDGKR
IC302	IC	LMV358IDGKR
IC303	IC	LMV358IDGKR
IC381	IC	LTC3412EFE#TR
IC382	IC	RN5VD28CA-TR
IC401	IC	LMV358IDGKR
IC402	IC	SP3232EEA_TR
PHT401	Photo Coupler	PC400T
PHT402	Photo Coupler	PC400T
PHT403	Photo Coupler	PC400T
PHT404	Photo Coupler	TLP181-GR-TPL
PHT405	Photo Coupler	TLP181-GR-TPL
TR321	Transistor	2SC2714-YTE85L
TR331	Transistor	2SC2714-YTE85L
TR341	Transistor	2SC2714-YTE85L
TR381	Transistor	2SC2712-YTE85L
TR382	Transistor	SI3433DV-T1
TR401	Transistor	RN1402-TE85L
X101	Crystal Oscillator	NX7551SA-3-24.576MHZ

## 2.NQE-3182 CONNECTION BOX

### 2.1 CDJ-3182 I/O CONTROL UNIT

AR631	Arrester	Y08U-90B
CD111	Diode	1SS319_TE85L
CD112	Diode	1SS319_TE85L
CD121	Diode	HSM107S-TL
CD122	Diode	HSM107S-TL
CD301	Diode	1SS184-TE85L
CD311	Diode	1SS184-TE85L
CD321	Diode	1SS184-TE85L
CD331	Diode	1SS184-TE85L
CD381	Diode	SML-210MT_T86_Green
CD382	Diode	1SS184-TE85L
CD501	Diode	SFPM-64V
CD531	Diode	SML-210MT_T86_Green
CD532	Diode	47ZR-10D
CD533	Diode	SML-210MT_T86_Green
CD534	Diode	1SS184-TE85L
CD535	Diode	HSM107S-TL
CD536	Diode	1SS184-TE85L
CD537	Diode	SFPM-64V
CD541	Diode	SFPM-64V
CD542	Diode	RD11M-B3-T1
CD543	Diode	1SS184-TE85L
CD561	Diode	EC21QS06
CD562	Diode	EC21QS06
CD581	Diode	SPB-G56S-VL
CD582	Diode	1SS184-TE85L
CD611	Diode	MA4Z71300L
CD612	Diode	MA4Z71300L
CD631	Diode	1SS306-TE85L
CD632	Diode	1SS306-TE85L
CD635	Diode	47ZR-10D
IC101	IC	TC7WU04FU-TE12L
IC111	IC	RN5VD28CA-TR
IC112	IC	RN5VD28CA-TR
IC121	IC	HD64F2328VTE25
IC181	IC	UPD441000LGU-B85X-9JH
IC191	IC	MBM29LV004TC-90PTN
IC201	IC	XC2S200E-6PQ208I
IC231	IC	EPM7032AETC44-10
IC232	IC	TC74HC4040AF-TP1
IC341	IC	SP490EEN/TR
IC361	IC	SP490EEN/TR
IC371	IC	SP490EEN/TR
IC401	IC	SP490EEN/TR
IC402	IC	SP490EEN/TR
IC421	IC	SP490EEN/TR
IC422	IC	SP490EEN/TR
IC441	IC	SP490EEN/TR

IC461	IC	SP232EEN/TR
IC481	IC	SP490EEN/TR
IC541	IC	NJM2903V-TE1
IC561	IC	NJM2360AM-TE1
IC562	IC	NJU7223DL1-33-TE1
IC581	IC	NJM2360AM-TE1
IC611	IC	LMV358IDGKR
J1	Connector	AXD264251
J2	Connector	TMP-J01X-A2
J3	Connector	XM2F-0910-112
J4	Connector	B13B-PH-K-S
PHT301	Photo Coupler	TLP181-GR-TPL
PHT311	Photo Coupler	TLP181-GR-TPL
PHT321	Photo Coupler	TLP181-GR-TPL
PHT331	Photo Coupler	TLP181-GR-TPL
PHT341	Photo Coupler	TLP181-GR-TPL
PHT342	Photo Coupler	PC400
PHT361	Photo Coupler	PC400
PHT371	Photo Coupler	PC400
PHT401	Photo Coupler	PC400
PHT402	Photo Coupler	PC400
PHT421	Photo Coupler	PC400
PHT422	Photo Coupler	PC400
PHT441	Photo Coupler	PC400
PHT442	Photo Coupler	PC400
PHT461	Photo Coupler	PC400
PHT462	Photo Coupler	PC400
PHT481	Photo Coupler	PC400
PHT482	Photo Coupler	PC400
PS501	PS Unit	CBS1002424-T
TR301	Transistor	2SK209BL-TE85L
TR311	Transistor	2SK209BL-TE85L
TR321	Transistor	2SK209BL-TE85L
TR331	Transistor	2SK209BL-TE85L
TR381	Transistor	2SK3018
TR531	Transistor	2SC2712-YTE85L
TR532	Transistor	2SC2712-YTE85L
TR533	Transistor	RN2102-TE85L
TR541	Transistor	2SC3515-O(TE12L)
TR542	Transistor	2SC2712-YTE85L
TR561	Transistor	2SJ377
TR581	Transistor	2SJ377
TR582	Transistor	SI3433DV-T1
TR583	Transistor	2SC2712-YTE85L
X101	Crystal Oscillator	H-7XHJD0014

2.2 CQD-3182      TERMINAL UNIT

CD1	Diode	47ZR-10D
CD2	Diode	47ZR-10D

2.3 CQD-5182      JUNCTION UNIT

CD1	Diode	Z2033
CD2	Diode	Z2033
CD3	Diode	Z2033
CD4	Diode	Z2033
IC1	IC	MAX490EPA
PHT1	Photo Coupler	PC900V0NSZX
PHT2	Photo Coupler	PC900V0NSZX

2.4 CMJ-3182      NSK UNIT(Option)

CD11	Diode	ERZCF2MK241
CD15	Diode	SFPM-64V
CD16	Diode	SFPM-64V
CD17	Diode	SFPM-64V
CD18	Diode	SFPM-64V
CD19	Diode	SFPM-64V
CD20	Diode	SFPM-64V
CD21	Diode	SFPM-64V
CD22	Diode	SML-210MT_T86_Green
CD23	Diode	SML-210MT_T86_Green
CD24	Diode	SML-210MT_T86_Green
CD25	Diode	SML-210MT_T86_Green
CD26	Diode	SML-210MT_T86_Green
CD27	Diode	SML-210MT_T86_Green
CD101	Diode	EC10QS06
CD102	Diode	EC10QS06
CD211	Diode	HSM107S-TL
CD212	Diode	HSM107S-TL
CD213	Diode	HSM107S-TL
CD214	Diode	HSM107S-TL
CD215	Diode	HSM107S-TL
CD216	Diode	HSM107S-TL
CD235	Diode	SML-210MT_T86_Green
CD236	Diode	SML-210MT_T86_Green
CD237	Diode	SML-210MT_T86_Green
CD271	Diode	1SS184-TE85L
IC11	IC	SN74LVC14ANSR
IC12	IC	TC74VHC123AFT(EL)
IC13	IC	NJM3404AV-TE1
IC14	IC	NJM3404AV-TE1
IC15	IC	NJM3404AV-TE1
IC16	IC	TC74HC4066AF-TP1
IC17	IC	TC74HC4066AF-TP1
IC18	IC	NJM3404AV-TE1
IC19	IC	NJM3404AV-TE1
IC20	IC	NJM3404AV-TE1
IC101	IC	NJM2360AM-TE1
IC102	IC	UPC29M33AT-E1
IC201	IC	HD64F2328VTE25
IC202	IC	UPD441000LGU-B85X-9JH
IC203	IC	SP232EEN/TR



IC204	IC	SP490EEN/TR
IC205	IC	RN5VD28CA-TR
IC206	IC	TC7WU04FU-TE12L
PS101	PS Unit	VS0505S
TR11	Transistor	2SC2618C-TL
TR101	Transistor	2SJ377
TR271	Transistor	2SK209BL-TE85L
W101	Wire Cable	H-7ZCJD0199
X201	Crystal Oscillator	H-7XHJD0014

### 3.NCM-779 AIS CONTROLLER

#### 3.1 CCK-2779 PANEL UNIT

CD501	LED	XN51P140H0Z
CD502	LED	XN51P140H0Z
CD503	LED	XN51P140H0Z
CD504	LED	XN51P140H0Z
CD505	LED	XN51P140H0Z
CD506	LED	XN51P140H0Z
CD507	LED	XN51P140H0Z
CD508	LED	XN51P140H0Z
CD509	LED	XN51P140H0Z
CD510	LED	XN51P140H0Z
CD511	LED	XN51P140H0Z
CD512	LED	XN51P140H0Z
CD513	LED	XN51P140H0Z
CD514	LED	XN51P140H0Z
CD515	LED	XN51P140H0Z
CD516	LED	XN51P140H0Z
D1	Diode	XN41P201H11
Q1	Transistor	XN41P038H0Z
Q2	Transistor	XN41P038H0Z
Q3	Transistor	XN41P038H0Z
Q4	Transistor	XN41P038H0Z

#### 3.2 CDJ-2779 CONTROL UNIT

CD1	LED	HSMF-C155
CD10	LED	HSMG-C170
CD11	LED	HSMG-C170
CD2	LED	HSMF-C155
CD3	LED	HSMF-C155
CD4	LED	HSMG-C170
CD5	LED	HSMG-C170
CD6	LED	HSMG-C170
CD7	LED	HSMG-C170
CD8	LED	HSMG-C170
CD9	LED	HSMG-C170
D1	Diode	1SS196-TE85L
D10	Diode	D1FS6
D11	Diode	1SS272-TE85L
D12	Diode	RB411D
D13	Diode	RB411D
D2	Diode	1SS196-TE85L
D3	Diode	1SS196-TE85L
D4	Diode	1SS196-TE85L
D5	Diode	1SS196-TE85L
D6	Diode	1SS196-TE85L
D7	Diode	1SS272-TE85L
D8	Diode	1SS272-TE85L
D9	Diode	1SS272-TE85L
IC1	IC	SP232EEN

IC10	IC	S1D13305F00A100
IC11	IC	XC9536XL-10PC44C
IC12	IC	HY628100BLLT1-55
IC13	IC	MB3793-30APNF
IC14	IC	SN74LVC14APW
IC15	IC	G6E-134P-US-DC5V
IC16	IC	TC7W74FU
IC17	IC	SN74LVC14APW
IC18	IC	SN74LVC08APW
IC2	IC	SN74LVC14APW
IC3	IC	SP490EEN
IC4	IC	SP490EEN
IC5	IC	HD64F2328VTE
IC6	IC	MBM29LV400TC-70PFTN
IC7	IC	HM62V8512CLTS-5SL
IC8	IC	SN74LVC240ADBR
IC9	IC	NJM2147M
PH1	Photo Coupler	TLP181
PH2	Photo Coupler	TLP181
PH3	Photo Coupler	TLP181
PH4	Photo Coupler	TLP181
PHT1	Photo Coupler	PC400
PHT2	Photo Coupler	PC400
PHT3	Photo Coupler	PC400
PHT4	Photo Coupler	PC400
PHT5	Photo Coupler	PC400
PHT6	Photo Coupler	PC400
PS1	Power Supply	BIC1422
PS2	Power Supply	LT1617ES5-1
PS3	Power Supply	LA0305
PS4	Power Supply	NJM7805DLA
TR1	Transistor	RN1302
TR10	Transistor	2SC2712Y-TE85L
TR2	Transistor	RN1302
TR3	Transistor	RN1302
TR4	Transistor	RN1302
TR5	Transistor	RN1302
TR6	Transistor	RN1302
TR7	Transistor	RN1302
TR8	Transistor	RN1302
TR9	Transistor	RN1302
X1	Crystal Oscillator	NX7551SA-3-24.576MHZ
XU1	Crystal Oscillator	SG8002JC 24.576MHz

#### 4. NQD-4382 JUNCTION BOX (Option)

##### 4.1 CMH-4182 DATA CONVERTER UNIT

AR30	Arrester	Y08U-90B
CD10	Arrester	47ZR-10D
CD11	Diode	SFPM-64V
CD12	LED	SML-210MT_T86_Green
CD13	Diode	EC10QS06
CD14	LED	SML-210MT_T86_Green
CD31	Arrester	47ZR-10D
CD40	Arrester	Z2033
CD41	Arrester	Z2033
CD42	Arrester	Z2033
CD43	Arrester	Z2033
CD70	Diode	MA4Z71300L
CD71	Diode	MA4Z71300L
CD80	Diode	1SS306
CD81	Diode	1SS306
IC10	IC	NJM2360AM-TE1
IC40	IC	SP490EEN/TR
IC50	IC	TC7WU04FU-TE12L
IC60	IC	TC7W32FU-TE12L
IC70	IC	NJM2406F-TE1
PHT40	Photo Coupler	PC400
PHT41	Photo Coupler	PC400
PS20	Power Supply	VS0505S
X50	Crystal Oscillator	H-7XHJD0015