

# Parts List

## 508630-0001

ASSY,TMS320C645X MEZZANINE CARD

Type	PL	PCB Package
Revision	C	ION Footprint
Status	U	Package Qty
Date		Bin Loc.
By		Cost

Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		Vendor P/N	Mfr Name		Mfr P/N
1	1 each	508631-0001	DWG C	PWB,TMS320C645X MEZZANINE CARD	
2	1 each	508632-0001	DOC C	LOGIC,TMS320C645X MEZZANINE CARD	
3	1 each	508638-0001	PL A	ASSY,MEZZANINE CPU LEG KIT	
4	1 each	508633-0001	PL A	GAL	U2
5	1 each	102080-0001R	PS	IC,SO8W,SERIAL EEPROM,2 WIRE	U36
				ATMEL CORPORATION	AT24C1024W-10SU-2.7
6	1 each	102261-0001	PS	IC,BGA,DSP,TMX320C6455	U10
				TEXAS INSTRUMENTS	TMX320C6455ZTZ
7	2 each	200003-0001R	PL A	DDR2 SDRAM,512M,3.75nSBGA92	U32, U33
8	1 each	102089-0001R	PS	IC,BGA256,ETHERNET PHY	U800
				Broadcom Corporation	BCM5464RA1KFBG
10	1 each	102000-0001R	PS	IC,QSOP20,LOW VOLTAGE,QUICK SWITCH	U3
				TEXAS INSTRUMENTS	74CBTLV3245APWRG4
12	1 each	102245-0015R	PS	IC,SON8,1.5V,400mA,LOW DROPOUT	U707
				TEXAS INSTRUMENTS	TPS73615DRBRG4
13	1 each	102116-0001R	PS	IC,SSOP8,DUAL VOLTAGE CLAMP	U801
				TEXAS INSTRUMENTS	SN74TVC3306DCTR
14	1 each	101918-0001R	PS	IC,TSSOP16,BUCK PWM	U601
				TEXAS INSTRUMENTS	TPS54350PWPRG4
15	1 each	101437-0001R	PS	IC,TSSOP20,ADJUSTABLE,LOW-DROPOUT	U1
				TEXAS INSTRUMENTS	TPS76701QPWPRG4

# Parts List

ASSY,TMS320C645X MEZZANINE CARD

508630-0001

Rev C

Printed 6/26/2006

Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		Vendor P/N	Mfr Name		Mfr P/N
16	1 each	102255-0001R	PS	IC,TSSOP20,BUCK PWM	U701
				TEXAS INSTRUMENTS	TPS54110PWPRG4
17	2 each	101888-0001R	PS	IC,TSSOP28,BUCK PWM CONVERTER,6A,3V-6V	U702, U703
				TEXAS INSTRUMENTS	TPS54610PWPRG4
18	1 each	101027-0001R	PS	IC,SO5,SINGLE SCHMITT-TRIGGER INVERTER	U4
				TEXAS INSTRUMENTS	SN74AHC1G14DCKRG4
19	1 each	102246-0001R	PS	IC,SMD TO263,LOW DROPOUT	U709
				TEXAS INSTRUMENTS	UC385TDKTTT-ADJ
20	1 each	102260-0001R	PS	IC,MSOP8,MOSFET,20V N-CHANNEL	Q601
				ZETEX INC.	ZXM64N02XTA
21	3 each	102020-0001R	PS	IC,DBV6,PROGRAMMABLE DELAY	U704, U705, U706
				TEXAS INSTRUMENTS	TPS3808G01DBVRG4
24	1 each	100983-0050R	PS	OSC,SMT,50 MHZ	U29
				CTS ELECTRONICS CORPORATION	CB3LV-3C-50.0000-T
25	1 each	102083-0125R	PS	OSC,SMT,125 MHZ,+/-50PPM,3.3V	U38
				Pletronics,Inc.	LV7745DV125.0M
26	1 each	100983-0025R	PS	OSC,SMT,25 MHZ	U28
				CTS ELECTRONICS CORPORATION	CB3LV-3C-25.0000-T
29	1 each	101590-0250R	PS	CRYSTAL,SMT,6mm,25 MHZ	Y800
				Citizen America Corporation	CS10-25.000MABJ-UT
30	2 each	102092-0001R	PS	TRANSISTOR,SMT,POWER,8 AMP	Q800, Q801
				ON Semiconductor	MJD45H11G
35	1 each	100185-0001R	PS	DIODE,SOT23,SWITCHING	D1
				DIODES INC.	BAS16-7-F
37	5 each	100823-0001R	PS	LED,SMT 1206,GREEN	D3, DS800, DS801, DS802, DS803
				LITEON	LTST-C150GKT

# Parts List

ASSY,TMS320C645X MEZZANINE CARD

508630-0001

Rev C

Printed 6/26/2006

Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		Vendor P/N	Mfr Name		Mfr P/N
40	7 each	102095-1222R	PS	FILTER,SMT 0603,EMI,2200pF,16V	E1, E2, E3, E4, E5, E6, E7
				Murata Electronics	NFM18CC222R1C3
45	1 each	101858-2201R	PS	FERRITE BEAD,SMT 0603,220 OHM	L800
				Murata Electronics	BLM18AG221SN1D
46	3 each	101858-6001R	PS	FERRITE BEAD,SMT 0603,600 OHM	L802, L803, L804
				Murata Electronics	BLM18AG601SN1D
47	4 each	101228-2201R	PS	FERRITE BEAD,SMT 0805,220 OHMS	L8, L7, L11, L9
				Murata Electronics	BLM21PG221SN1D
50	1 each	101643-0221R	PS	INDUCTOR,SMT,22uH	L601
				Coiltronics Incorporated	DR127-220-R
51	2 each	102253-0470R	PS	INDUCTOR,SMT,HIGH CURRENT,4.7uH,LOW	L702, L703
				Vishay Intertechnology	IHLP5050CEER4R7M01
52	1 each	102222-0470R	PS	INDUCTOR,SMT,HIGH CURRENT,4.7uH,LOW	L701
				Vishay Intertechnology	IHLP2525CZER4R7M01
60	11 each	101894-0472R	PS	CAP,POSCAP,SMT 2816,470uF,6.3V	C186, C187, C188, C189, C190, C191, C192, C193, C194, C195, C196
				SANYO Electronic Components Co. Ltd.	6TPB470M
61	1 each	101290-0102R	PS	CAP,TANT,SMT 2816,100uF,16V	C612
				KEMET ELECTRONICS CORPORATION	T491D107K016AT
62	1 each	101008-0220R	PS	CAP,TANT,SMT 2816,220uF,10V	C603
				KEMET ELECTRONICS CORPORATION	T491X227K010AT
63	3 each	101893-0332R	PS	CAP,TANT,SMT 2816,330uF,6.3V,20%	C703, C708, C710
				AVX CORPORATION	TPSE337M006R0100
64	1 each	101297-0471R	PS	CAP,TANT,SMT 2816,47uF,16V	C611
				KEMET ELECTRONICS CORPORATION	T491D476K016AT

# Parts List

ASSY,TMS320C645X MEZZANINE CARD

508630-0001

Rev C

Printed 6/26/2006

Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		Vendor P/N	Mfr Name		Mfr P/N
66	1 each	101953-0331R	PS	CAP,TANT,SMT 1206,33uF,6.3V,LOW ESR	C614
				AVX CORPORATION	TPSA336K006R0600
68	7 each	101349-0102R	PS	CAP,CER,SMT 2220,100uF,X5R,6.3V	C721, C719, C720, C722, C725, C730, C738
				Murata Electronics	GRM55FR60J107KA01
70	1 each	101583-1102R	PS	CAP,CER,SMT 1812,1000pF,X7R,2KV	C800
				AVX CORPORATION	1812GC102KAT1A
72	3 each	101062-0101R	PS	CAP,CER,SMT 1210,10uF,16V	C701, C705, C728
				TAIYO YUDEN	EMK325F106ZF-T
74	16 each	101497-0101R	PS	CAP,CER,SMT 1206,10uF,6.3V	C67, C68, C217, C218, C219, C229, C230, C741, C746, C834, C842, C849, C852, C865, C872, C150
				TAIYO YUDEN	JMK316BJ106ML
75	4 each	101064-0221R	PS	CAP,CER,SMT 1206,22uF,10V	C838, C843, C870, C876
				TAIYO YUDEN	LMK316F226ZL-T
80	1 each	100201-1152R	PS	CAP,CER,SMT 0805,1500pF,50V,+10/-10%,X7R	C718
				PANASONIC	ECJ-2VB1H152K
81	1 each	101425-1102R	PS	CAP,CER,SMT 0805,1000pF,50V,NPO	C723
				Yageo	CC0805JRNPO9BN102
85	1 each	100993-1101R	PS	CAP,CER,SMT 0603,.01uF,50V,+/-10%,X7R	C608
				AVX CORPORATION	06035C103KAT2A
86	1 each	100994-1331R	PS	CAP,CER,SMT 0603,.033uF,16V,+/-10%,X7R	C602
				PANASONIC	ECJ-1VB1C333K
87	3 each	100994-1391R	PS	CAP,CER,SMT 0603,.039uF,16V,+/-10%,X7R	C706, C707, C733
				PANASONIC	ECJ-1VB1C393K
88	3 each	100994-1471R	PS	CAP,CER,SMT 0603,.047uF,16V,+/-10%,X7R	C711, C712, C729
				PANASONIC	ECJ-1VB1C473K
89	1 each	100993-1563R	PS	CAP,CER,SMT 0603,560pF,50V,+/-10%,X7R	C783
				AVX CORPORATION	06035C561KAT2A

# Parts List

ASSY,TMS320C645X MEZZANINE CARD

508630-0001

Rev C

Printed 6/26/2006

Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		Vendor P/N	Mfr Name		Mfr P/N
90	8 each	100994-1100R	PS	CAP,CER,SMT 0603,.1uF,16V,+/-10%,X7R	C1, C601, C613, C615, C736, C742, C743, C744
				KEMET ELECTRONICS CORPORATION	C0603C104K4RAC
91	7 each	101007-0100R	PS	CAP,CER,SMT 0603,1uF,6.3V,X5R,+/-10%	C163, C605, C734, C735, C702, C704, C709
				PANASONIC	ECJ-1VB0J105K
92	2 each	101002-1224R	PS	CAP,CER,SMT 0603,22pF,50V,+/-5%,NPO	C871, C837
				PANASONIC	ECJ-1VC1H220J
93	2 each	100993-1332R	PS	CAP,CER,SMT 0603,3300pF,50V,+/-10%,X7R	C724, C727
				AVX CORPORATION	06035C332KAT2A
96	1 each	101002-1474R	PS	CAP,CER,SMT 0603,47pF,50V,+/-5%,NPO	C715
				PANASONIC	ECJ-1VC1H470J
97	1 each	101236-1103R	PS	CAP,CER,SMT 0603,100pF,5%,NPO	C717
				Vishay Intertechnology	VJ0603A101JXA
98	2 each	100993-1203R	PS	CAP,CER,SMT 0603,120pF,50V,+/-10%,X7R	C726, C609
				AVX CORPORATION	06035C121KAT2A
99	2 each	100993-1222R	PS	CAP,CER,SMT 0603,2200pF,50V,+/-10%,X7R	C731, C607
				AVX CORPORATION	06035C222KAT2A
100	5 each	101587-1101R	PS	CAP,CER,SMT 0402,.01uF,16V,+/-10%,X7R	C134, C854, C164, C167, C168
				KEMET ELECTRONICS CORPORATION	C0402C103K4RAC

## Parts List

ASSY,TMS320C645X MEZZANINE CARD

508630-0001

Rev C

Printed 6/26/2006

Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		Vendor P/N	Mfr Name		Mfr P/N
101	187 each	101587-1100R	PS	CAP,CER,SMT 0402,-1uF,10V,+/-10%,X5R	C2, C130, C765, C784, C786, C787, C798, C799, C3, C4, C38, C21, C22, C23, C24, C169, C171, C174, C176, C178, C180, C240, C25, C26, C27, C29, C30, C31, C32, C33, C34, C35, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C100, C101, C102, C103, C104, C105, C106, C107, C108, C109, C110, C111, C112, C125, C133, C292, C293, C41, C42, C129, C139, C140, C142, C143, C144, C145, C151, C152, C153, C154, C162, C166, C197, C198, C199, C200, C201, C202, C203, C204, C205, C206, C207, C208, C220, C221, C222, C223, C224, C225, C231, C232, C233, C234, C254, C255, C256, C257, C258, C259, C260, C261, C262, C263, C814, C815, C816, C817, C818, C819, C820, C821, C822, C823, C824, C825, C826, C827, C828, C829, C830, C831, C832, C833, C850, C851, C853, C855, C856, C857, C858, C859, C860, C861, C862, C863, C864, C866, C801, C802, C803, C804, C805, C806, C807, C808, C835, C836, C839, C840, C841, C845, C846, C847, C848, C867, C868, C869, C873, C874, C875, C877

# Parts List

ASSY,TMS320C645X MEZZANINE CARD

508630-0001

Rev C

Printed 6/26/2006

Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		Vendor P/N	Mfr Name		Mfr P/N
		KEMET ELECTRONICS CORPORATION		C0402C104K8PAC	
102	42 each	101587-5601R	PS	CAP,CER,SMT 0402,560pF,25V,+/-10%,X7R	C43, C44, C45, C63, C64, C65, C66, C73, C74, C75, C92, C146, C147, C148, C149, C155, C156, C157, C158, C165, C209, C210, C211, C212, C213, C214, C215, C216, C226, C227, C228, C235, C236, C237, C238, C170, C172, C173, C175, C177, C179, C239
		KEMET ELECTRONICS CORPORATION		C0402C561K5RAC	
103	1 each	102366-1685R	PS	CAP,CER,SMT 0402,6.8pF,50V,+/-5pF,C0G	C126
		Murata Electronics		GRM1555C1H6R8DZ01D	
110	1 each	101069-1000R	PS	RES,NETWORK,SMT,16 PIN,8 RES,10	RN33
		PANASONIC		EXB-2HV100JV	
111	3 each	101069-3900R	PS	RES,NETWORK,SMT,16 PIN,8 RES,39	RN1, RN2, RN3
		PANASONIC		EXB-2HV390JV	
115	10 each	101370-0001R	PS	RES,SMT 0402,0 OHM,1/16 WATT	R6, R7, R502, R503, R844, R890, R891, R892, R893, R14
		Yageo		RC0402JR-070RL	
116	6 each	101370-1001R	PS	RES,SMT 0402,100 OHM,5%,1/16 WATT	R20, R21, R121, R404, R91, R95
		Yageo		RC0402JR-07100RL	
117	1 each	101370-1004R	PS	RES,SMT 0402,100K,5%,1/16 WATT	R843
		Yageo		RC0402JR-07100KL	
118	11 each	101370-1003R	PS	RES,SMT 0402,10K,5%,1/16 WATT	R3, R468, R469, R470, R424, R425, R488, R822, R824, R825, R828
		Yageo		RC0402JR-0710KL	
119	25 each	101370-1002R	PS	RES,SMT 0402,1K,5%,1/16 WATT	R4, R5, R427, R432, R433, R440, R466, R467, R471, R472, R473, R438, R439, R458, R450, R451, R452, R453, R456, R457, R459, R464, R465, R405, R463
		Yageo		RC0402JR-071KL	

# Parts List

ASSY,TMS320C645X MEZZANINE CARD

508630-0001

Rev C

Printed 6/26/2006

Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		Vendor P/N	Mfr Name		Mfr P/N
120	1 each	101370-3300R	PS	RES,SMT 0402,33 OHM,5%,1/16 WATT	R10
				Yageo	RC0402JR-0733RL
121	7 each	101370-3601R	PS	RES,SMT 0402,360 OHM,5%,1/16 WATT	R41, R814, R815, R816, R894, R802, R803
				Yageo	RC0402JR-07360RL
122	2 each	101370-4702R	PS	RES,SMT 0402,4.7K OHM,5%,1/16 WATT	R211, R212
				Yageo	RC0402JR-074K7L
123	2 each	101370-3901R	PS	RES,SMT 0402,390 OHM,5%,1/16 WATT	R845, R846
				Yageo	RC0402JR-07390RL
124	5 each	101370-2202R	PS	RES,SMT 0402,2.2K OHM,5%,1/16 WATT	R442, R445, R446, R447, R448
				Yageo	RC0402JR-072K2L
125	2 each	101370-2200R	PS	RES,SMT 0402,22 OHM,5%,1/16 WATT	R92, R93
				Yageo	RC0402JR-0722RL
127	2 each	102145-1002R	PS	RES,SMT 0402,1K,1%,1/16 WATT	R413, R414
				Yageo	RC0402FR-071KL
130	4 each	100687-0001R	PS	RES,SMT 0603,0 OHM,1/16 WATT	R727, R728, R729, R11
				PANASONIC	ERJ-3GEY0R00V
132	1 each	100687-2201R	PS	RES,SMT 0603,220 OHM,5%,1/16 WATT	R52
				PANASONIC	ERJ-3GEYJ221V
135	1 each	100642-1242R	PS	RES,SMT 0603,1.24K OHM,1%,1/16 WATT	R829
				PANASONIC	ERJ-3EKF1241V
136	2 each	100642-1001R	PS	RES,SMT 0603,100 OHM,1%,1/16 WATT	R838, R836
				Yageo	RC0603FR-07100RL
139	17 each	100642-1003R	PS	RES,SMT 0603,10K OHM,1%,1/16 WATT	R603, R703, R714, R715, R716, R717, R722, R785, R724, R790, R797, R800, R801, R804, R805, R12, R13
				PANASONIC	ERJ-3EKF1002V
141	1 each	100642-3323R	PS	RES,SMT 0603,33.2K OHM,1%,1/16 WATT	R1
				PANASONIC	ERJ-3EKF3322V



# Parts List

ASSY,TMS320C645X MEZZANINE CARD

508630-0001

Rev C

Printed 6/26/2006

Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		Vendor P/N	Mfr Name		Mfr P/N
142	1 each	100642-3831R	PS	RES,SMT 0603,383 OHM,1%,1/16 WATT	R719
				PANASONIC	ERJ-3EKF3830V
143	1 each	100642-1002R	PS	RES,SMT 0603,1K OHM,1%,1/16 WATT	R895
				PANASONIC	ERJ-3EKF1001V
144	1 each	100642-2152R	PS	RES,SMT 0603,2.15K OHM,1%,1/16 WATT	R605
				PANASONIC	ERJ-3EKF2151V
146	1 each	100642-4322R	PS	RES,SMT 0603,4.32K OHM,1%,1/16 WATT	R602
				PANASONIC	ERJ-3EKF4321V
147	1 each	100642-2000R	PS	RES,SMT 0603,20 OHM,1%,1/16 WATT	R487
				PANASONIC	ERJ-3EKF20R0V
148	4 each	100642-2001R	PS	RES,SMT 0603,200 OHM,1%,1/16 WATT	R482, R483, R484, R485
				Yageo	RC0603FR-07200RL
149	1 each	100642-2002R	PS	RES,SMT 0603,2K OHM,1%,1/16 WATT	R606
				Yageo	RC0603FR-072KL
150	1 each	100642-3742R	PS	RES,SMT 0603,3.74K OHM,1%,1/16 WATT	R707
				PANASONIC	ERJ-3EKF3741V
151	2 each	100642-3013R	PS	RES,SMT 0603,30.1K OHM,1%,1/16 WATT	R94, R2
				PANASONIC	ERJ-3EKF3012V
152	1 each	100642-8062R	PS	RES,SMT 0603,8.06K OHM,1%,1/16 WATT	R721
				PANASONIC	ERJ-3EKF8061V
153	1 each	100642-4020R	PS	RES,SMT 0603,40.2 OHM,1%,1/16 WATT	R486
				PANASONIC	ERJ-3EKF40R2V
154	8 each	100642-4990R	PS	RES,SMT 0603,49.9 OHM,1%,1/16 WATT	R806, R807, R808, R809, R810, R811, R812, R813
				PANASONIC	ERJ-3EKF49R9V
155	1 each	100642-2153R	PS	RES,SMT 0603,21.5K OHM,1%,1/16 WATT	R777
				PANASONIC	ERJ-3EKF2152V

# Parts List

ASSY,TMS320C645X MEZZANINE CARD

508630-0001

Rev C

Printed 6/26/2006

Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		Vendor P/N	Mfr Name		Mfr P/N
157	3 each	100642-7153R	PS	RES,SMT 0603,71.5K OHM,1%,1/16 WATT	R701, R702, R709
				PANASONIC	ERJ-3EKF7152V
158	1 each	100642-1302R	PS	RES,SMT 0603,1.3K OHM,1%,1/16 WATT	R712
				PANASONIC	ERJ-3EKF1301V
159	1 each	100642-6981R	PS	RES,SMT 0603,698 OHM,1%,1/16 WATT	R713
				PANASONIC	ERJ-3EKF6980V
161	1 each	100642-2873R	PS	RES,SMT 0603,28.7K OHM,1%,1/16 WATT	R708
				PANASONIC	ERJ-3EKF2872V
162	1 each	100642-1963R	PS	RES,SMT 0603,19.6K OHM,1%,1/16 WATT	R711
				PANASONIC	ERJ-3EKF1962V
163	1 each	100642-9762R	PS	RES,SMT 0603,9.76K OHM,1%,1/16 WATT	R718
				PANASONIC	ERJ-3EKF9761V
164	1 each	100642-9531R	PS	RES,SMT 0603,953 OHM,1%,1/16 WATT	R604
				PANASONIC	ERJ-3EKF9530V
165	1 each	102093-0001	PS	TRANSFORMER,SMT,GIGABIT ETHERNET	T800
				Bel Fuse Inc.	S558-5999-T4
170	1 each	101184-0008R	PS	SWITCH,DIP,SMT,HALF-PITCH,8 POS.	SW3
				C&K/UNIMAX, INC.	TDA08H0SB1
171	1 each	101215-0001R	PS	SWITCH,SMT,PUSHBUTTON,MOMENTARY,6mm	SW2
				PANASONIC	EVQP1B05M
175	1 each	101575-0001R	PS	CONN,JACK,RJ45,8 CONTACTS WITH	J800
				Tyco Electronics	2-406549-1
178	1 each	101345-0015R	PS	CONN,SMT,RECEPTACLE,4X15	J7
				SAMTEC, INC.	SOLC-115-02-S-Q-A
179	1 each	101895-0007R	PS	CONN,SMT,SHROUDED,7x2,2mm,PIN	J801
				MOLEX	87832-1420

# Parts List

ASSY,TMS320C645X MEZZANINE CARD

508630-0001

Rev C

Printed 6/26/2006

Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		Vendor P/N		Mfr Name	Mfr P/N
<b>180</b>	<b>1</b> each	<b>100562-0040R</b>	PS	<b>CONN,SMT,VERTICAL,RECEPTACLE,40X2</b>	J1
				SAMTEC, INC.	SFM-140-02-S-D-LC
<b>181</b>	<b>1</b> each	<b>102254-0170R</b>	PS	<b>CONN,SMT COMPRESSION,AMC TYPE B+,170</b>	J9
				YAMAICHI ELECTRONICS, INC.	CN074-170-0005
<b>200</b>	<b>39</b> each	<b>0402-NOPOP</b>	PS		R505, R429, R430, R431, R435, R436, R437, R441, R444, R449, R455, R460, R461, R462, R463, R454, R817, R818, R819, R820, R821, R823, R826, R827, R830, R831, R832, R833, R834, R835, R837, R839, R840, R841, R842, R428, R434, R443, R481
<b>201</b>	<b>17</b> each	<b>0603-NOPOP</b>	PS		C713, C714, C732, C737, C739, C740, R782, R799, R510, R511, R704, R705, R720, R723, R730, R706, R601
<b>202</b>	<b>22</b> each	<b>NO-POP</b>	PS		TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP11, TP12, TP701, TP702, TP703, TP704, TP705, TP602, D701, J9, L3, L4, TP13, TP14, TP15