# Pin Out For ECP5U-25

# Revision 1.1 - Include CABGA256 package

# Revise 2017

# Revision 2.0 - Include TQFP144 package

# Revise 2021

1         PL2A         7         -         Comp_OF_PL2A         TRUE         LDQ8           2         PL2B         7         -         Comp_OF_PL2D         -         TRUE         LDQ8           4         PL2C         7         -         Comp_OF_PL2D         -         LDQ8           6         PL2D         7         -         Comp_OF_PLSD         -         LDQ8           7         PLSA         7         -         True_OF_PLSD         -         LDQ8           9         PL5C         7         -         Comp_OF_PLSD         -         LDQ8           10         PLSB         7         -         Comp_OF_PLSC         -         LDQ8           12         PL5D         7         -         Comp_OF_PLSC         -         LDQ8           13         PL8A         7         -         Comp_OF_PLSC         -         LDQ8           15         PLSD         7         -         Comp_OF_PLSC         -         LDQ8           16         PL8B         7         -         Comp_OF_PLBA         TRUE         LDQS           16         PL8B         7         -         Comp_OF_PLBA         -	PAD	Pin/Ball Function	Bank	<b>Dual Function</b>	Differential	High Speed	DQS
4         PL2C         7         -         True_OF_PL2D         -         LDQ8           6         PL2D         7         -         Comp_OF_PL2C         -         LDQ8           7         PL5A         7         -         True_OF_PL5D         -         LDQ8           9         PLSC         7         -         Comp_OF_PL5A         TRUE         LDQ8           10         PLSB         7         -         Comp_OF_PL5C         -         LDQ8           12         PLSD         7         -         Comp_OF_PL5C         -         LDQ8           13         PL8A         7         -         True_OF_PLBB         TRUE         LDQ8           15         PL8C         7         -         True_OF_PLBB         TRUE         LDQ8           16         PLBB         7         -         Comp_OF_PLBC         -         LDQ8           18         PLBO         7         -         Comp_OF_PLBC         -         LDQ8           19         PL11A         7         -         Comp_OF_PLBC         -         LDQ8           19         PL11A         7         -         Comp_OF_PL1C         -         LDQ8 <td>1</td> <td>PL2A</td> <td>7</td> <td>-</td> <td>True_OF_PL2B</td> <td>TRUE</td> <td>LDQ8</td>	1	PL2A	7	-	True_OF_PL2B	TRUE	LDQ8
6         PL2D         7         -         Comp_OF_PL2C         LDQ8           7         PL5A         7         -         True_OF_PL5B         TRUE         LDQ8           9         PL5C         7         -         True_OF_PL5D         -         LDQ8           10         PL5B         7         -         Comp_OF_PL5A         TRUE         LDQ8           12         PL5D         7         -         Comp_OF_PL8C         -         LDQ8           13         PL8A         7         -         True_OF_PL8B         TRUE         LDQ8           15         PL8C         7         -         Comp_OF_PL8A         TRUE         LDQS8           16         PL8B         7         -         Comp_OF_PL8C         LDQS         LDQS           18         PL8D         7         -         Comp_OF_PL8C         LDQS         LDQS           19         PL11A         7         -         Comp_OF_PL8C         LDQS         LDQS           19         PL11A         7         -         Comp_OF_PL8C         LDQS         LDQS           21         PL11A         7         -         Comp_OF_PL1B         TUB         LDQS </td <td>2</td> <td>PL2B</td> <td>7</td> <td>-</td> <td>Comp_OF_PL2A</td> <td>TRUE</td> <td>LDQ8</td>	2	PL2B	7	-	Comp_OF_PL2A	TRUE	LDQ8
7         PLSA         7         -         True_OF_PLSB         TRUE         LDQ8           9         PLSC         7         -         True_OF_PLSD         -         LDQ8           10         PLSB         7         -         Comp_OF_PLSC         -         LDQ8           12         PLSD         7         -         Comp_OF_PLSC         -         LDQ8           13         PL8A         7         -         True_OF_PLSB         TRUE         LDQ8           15         PL8C         7         -         Comp_OF_PL8A         TRUE         LDQ8           16         PL8B         7         -         Comp_OF_PL8C         -         LDQ8           16         PL8B         7         -         Comp_OF_PL8C         -         LDQ8           19         PL11A         7         -         Comp_OF_PL8C         -         LDQ8           21         PL11A         7         -         True_OF_PL1A         TRUE         LDQ8           21         PL11A         7         -         Comp_OF_PL1A         TRUE         LDQ2           22         PL11B         7         -         Comp_OF_PL11A         TRUE         LDQ	4	PL2C	7	-	True_OF_PL2D	-	LDQ8
9         PL5C         7         -         True_OF_PL5D         -         LDQ8           10         PL5B         7         -         Comp_OF_PL5C         -         LDQ8           12         PL5D         7         -         Comp_OF_PL5C         -         LDQ8           13         PL8A         7         -         True_OF_PL8B         TRUE         LDQ8           15         PL8C         7         -         Comp_OF_PL8C         -         LDQ8           16         PL8B         7         -         Comp_OF_PL8C         -         LDQ8           18         PL8D         7         -         Comp_OF_PL8C         -         LDQ8           19         PL11A         7         -         True_OF_PL11B         TRUE         LDQ8           21         PL11C         7         -         True_OF_PL11B         TRUE         LDQ8           21         PL11D         7         -         Comp_OF_PL11B         TRUE         LDQ8           21         PL11A         7         -         Comp_OF_PL11B         TRUE         LDQ2           22         PL11B         7         -         Comp_OF_PL14A         TRUE         <	6	PL2D	7	-	Comp_OF_PL2C	-	LDQ8
10	7	PL5A	7	-	True_OF_PL5B	TRUE	LDQ8
PLSD	9	PL5C	7	-	True_OF_PL5D	-	LDQ8
13	10	PL5B	7	-	Comp_OF_PL5A	TRUE	LDQ8
True_OF_PL8D   -   LDQ8	12	PL5D	7	-	Comp_OF_PL5C	-	LDQ8
16	13	PL8A	7	-	True_OF_PL8B	TRUE	LDQS8
18	15	PL8C	7	-	True_OF_PL8D	-	LDQ8
19         PL11A         7         -         True_OF_PL11B         TRUE         LDQ8           21         PL11C         7         -         True_OF_PL11D         -         LDQ8           22         PL11B         7         -         Comp_OF_PL11A         TRUE         LDQ8           24         PL11D         7         -         Comp_OF_PL14C         -         LDQ20           25         PL14A         7         -         True_OF_PL14B         TRUE         LDQ20           27         PL14C         7         VREF1_7         True_OF_PL14D         -         LDQ20           28         PL14B         7         -         Comp_OF_PL14C         -         LDQ20           30         PL14D         7         -         Comp_OF_PL14C         -         LDQ20           31         PL17A         7         -         True_OF_PL17D         -         LDQ20           33         PL17C         7         -         True_OF_PL17D         -         LDQ20           34         PL17B         7         -         Comp_OF_PL17A         TRUE         LDQ20           36         PL17D         7         -         Comp_OF_PL20B	16	PL8B	7	-	Comp_OF_PL8A	TRUE	LDQSN8
21         PL11C         7         -         True_OF_PL11D         -         LDQ8           22         PL11B         7         -         Comp_OF_PL11A         TRUE         LDQ8           24         PL11D         7         -         Comp_OF_PL1AB         TRUE         LDQ20           25         PL14A         7         -         True_OF_PL1AB         TRUE         LDQ20           27         PL14C         7         VREF1_7         True_OF_PL1AB         TRUE         LDQ20           28         PL14B         7         -         Comp_OF_PL1AD         -         LDQ20           28         PL14B         7         -         Comp_OF_PL1AA         TRUE         LDQ20           30         PL14D         7         -         Comp_OF_PL1AC         -         LDQ20           31         PL17A         7         -         True_OF_PL17B         TRUE         LDQ20           34         PL17B         7         -         Comp_OF_PL17C         -         LDQ20           34         PL17B         7         -         Comp_OF_PL17A         TRUE         LDQ20           37         PL20A         7         GR_PCLK7_1         True_	18	PL8D	7	-	Comp_OF_PL8C	-	LDQ8
22         PL11B         7         -         Comp_OF_PL11A         TRUE         LDQ8           24         PL11D         7         -         Comp_OF_PL11C         -         LDQ8           25         PL14A         7         -         True_OF_PL14B         TRUE         LDQ20           27         PL14C         7         VREF1_7         True_OF_PL14D         -         LDQ20           28         PL14B         7         -         Comp_OF_PL14A         TRUE         LDQ20           30         PL14D         7         -         Comp_OF_PL17A         TRUE         LDQ20           31         PL17A         7         -         True_OF_PL17B         TRUE         LDQ20           33         PL17C         7         -         True_OF_PL17D         -         LDQ20           34         PL17B         7         -         Comp_OF_PL17A         TRUE         LDQ20           36         PL17D         7         -         Comp_OF_PL17C         -         LDQ20           37         PL20A         7         GR_PCLK7_1         True_OF_PL20B         TRUE         LDQ20           39         PL20C         7         GR_PCLK7_0	19	PL11A	7	-	True_OF_PL11B	TRUE	LDQ8
24         PL11D         7         -         Comp_OF_PL11C         -         LDQ8           25         PL14A         7         -         True_OF_PL14B         TRUE         LDQ20           27         PL14C         7         VREF1_7         True_OF_PL14D         -         LDQ20           28         PL14B         7         -         Comp_OF_PL14D         -         LDQ20           30         PL14D         7         -         Comp_OF_PL17B         TRUE         LDQ20           31         PL17A         7         -         True_OF_PL17B         TRUE         LDQ20           33         PL17C         7         -         True_OF_PL17D         -         LDQ20           34         PL17B         7         -         Comp_OF_PL17D         -         LDQ20           36         PL17D         7         -         Comp_OF_PL17A         TRUE         LDQ20           37         PL20A         7         GR_PCLK7_1         True_OF_PL17C         -         LDQ20           39         PL20A         7         GR_PCLK7_0         True_OF_PL20B         TRUE         LDQ20           40         PL20B         7         -         C	21	PL11C	7	-	True_OF_PL11D	-	LDQ8
25         PL14A         7         -         True_OF_PL14B         TRUE         LDQ20           27         PL14C         7         VREF1_7         True_OF_PL14D         -         LDQ20           28         PL14B         7         -         Comp_OF_PL14D         -         LDQ20           30         PL14D         7         -         Comp_OF_PL17B         TRUE         LDQ20           31         PL17A         7         -         True_OF_PL17B         TRUE         LDQ20           33         PL17C         7         -         Comp_OF_PL17D         -         LDQ20           34         PL17B         7         -         Comp_OF_PL17D         -         LDQ20           36         PL17D         7         -         Comp_OF_PL17A         TRUE         LDQ20           37         PL20A         7         -         Comp_OF_PL17A         TRUE         LDQ20           37         PL20A         7         -         Comp_OF_PL17D         -         LDQ20           39         PL20A         7         GR_PCLK7_1         True_OF_PL20B         TRUE         LDQ20           40         PL20B         7         -         Comp_O	22	PL11B	7	-	Comp_OF_PL11A	TRUE	LDQ8
27         PL14C         7         VREF1_7         True_OF_PL14D         -         LDQ20           28         PL14B         7         -         Comp_OF_PL14A         TRUE         LDQ20           30         PL14D         7         -         Comp_OF_PL14C         -         LDQ20           31         PL17A         7         -         True_OF_PL17B         TRUE         LDQ20           33         PL17C         7         -         True_OF_PL17D         -         LDQ20           34         PL17B         7         -         Comp_OF_PL17A         TRUE         LDQ20           36         PL17D         7         -         Comp_OF_PL17C         -         LDQ20           37         PL20A         7         GR_PCLK7_1         True_OF_PL20B         TRUE         LDQ20           39         PL20C         7         GR_PCLK7_0         True_OF_PL20B         TRUE         LDQ20           40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQ20           42         PL20D         7         -         Comp_OF_PL20A         TRUE         LDQ20           43         PL23A         7         PCLKT7_1	24	PL11D	7	-	Comp_OF_PL11C	-	LDQ8
28         PL14B         7         -         Comp_OF_PL14A         TRUE         LDQ20           30         PL14D         7         -         Comp_OF_PL14C         -         LDQ20           31         PL17A         7         -         True_OF_PL17B         TRUE         LDQ20           33         PL17C         7         -         Comp_OF_PL17D         -         LDQ20           34         PL17B         7         -         Comp_OF_PL17A         TRUE         LDQ20           36         PL17D         7         -         Comp_OF_PL17C         -         LDQ20           37         PL20A         7         GR_PCLK7_1         True_OF_PL20B         TRUE         LDQ20           39         PL20C         7         GR_PCLK7_0         True_OF_PL20B         TRUE         LDQ20           40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQ20           42         PL20D         7         -         Comp_OF_PL20A         TRUE         LDQ20           43         PL23A         7         PCLKT7_1         True_OF_PL23B         TRUE         LDQ20           45         PL23C         7         PCLK7_1 </td <td>25</td> <td>PL14A</td> <td>7</td> <td>-</td> <td>True_OF_PL14B</td> <td>TRUE</td> <td>LDQ20</td>	25	PL14A	7	-	True_OF_PL14B	TRUE	LDQ20
30         PL14D         7         -         Comp_OF_PL14C         -         LDQ20           31         PL17A         7         -         True_OF_PL17B         TRUE         LDQ20           33         PL17C         7         -         True_OF_PL17D         -         LDQ20           34         PL17B         7         -         Comp_OF_PL17C         -         LDQ20           36         PL17D         7         -         Comp_OF_PL20B         TRUE         LDQ20           37         PL20A         7         GR_PCLK7_1         True_OF_PL20B         TRUE         LDQ20           39         PL20C         7         GR_PCLK7_0         True_OF_PL20D         -         LDQ20           40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQ20           42         PL20D         7         -         Comp_OF_PL20A         TRUE         LDQ20           43         PL23A         7         PCLKT7_1         True_OF_PL20A         TRUE         LDQ20           45         PL23C         7         PCLKT7_1         True_OF_PL23B         TRUE         LDQ20           46         PL23B         7         PCLKC	27	PL14C	7	VREF1_7	True_OF_PL14D	-	LDQ20
31         PL17A         7         -         True_OF_PL17B         TRUE         LDQ20           33         PL17C         7         -         True_OF_PL17D         -         LDQ20           34         PL17B         7         -         Comp_OF_PL17C         -         LDQ20           36         PL17D         7         -         Comp_OF_PL17C         -         LDQ20           37         PL20A         7         GR_PCLK7_1         True_OF_PL20B         TRUE         LDQ20           39         PL20C         7         GR_PCLK7_0         True_OF_PL20D         -         LDQ20           40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQ20           40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQ20           40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQ20           42         PL20D         7         -         Comp_OF_PL20A         TRUE         LDQ20           43         PL23A         7         PCLKT7_1         True_OF_PL23B         TRUE         LDQ20           45         PL23C         7         PCLKC7_1 <td>28</td> <td>PL14B</td> <td>7</td> <td>-</td> <td>Comp_OF_PL14A</td> <td>TRUE</td> <td>LDQ20</td>	28	PL14B	7	-	Comp_OF_PL14A	TRUE	LDQ20
33         PL17C         7         -         True_OF_PL17D         -         LDQ20           34         PL17B         7         -         Comp_OF_PL17A         TRUE         LDQ20           36         PL17D         7         -         Comp_OF_PL17C         -         LDQ20           37         PL20A         7         GR_PCLK7_1         True_OF_PL20B         TRUE         LDQ20           39         PL20C         7         GR_PCLK7_0         True_OF_PL20D         -         LDQ20           40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQ20           40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQ20           42         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQ20           42         PL20D         7         -         Comp_OF_PL20A         TRUE         LDQ20           43         PL23A         7         PCLKT7_1         True_OF_PL23B         TRUE         LDQ20           45         PL23C         7         PCLKT7_0         True_OF_PL23A         TRUE         LDQ20           48         PL23B         7         PC	30	PL14D	7	-	Comp_OF_PL14C	-	LDQ20
34         PL17B         7         -         Comp_OF_PL17A         TRUE         LDQ20           36         PL17D         7         -         Comp_OF_PL17C         -         LDQ20           37         PL20A         7         GR_PCLK7_1         True_OF_PL20B         TRUE         LDQ20           39         PL20C         7         GR_PCLK7_0         True_OF_PL20D         -         LDQ20           40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQ20           42         PL20D         7         -         Comp_OF_PL20A         TRUE         LDQ20           43         PL23A         7         PCLKT7_1         True_OF_PL23B         TRUE         LDQ20           45         PL23C         7         PCLKT7_0         True_OF_PL23B         TRUE         LDQ20           46         PL23B         7         PCLKC7_1         Comp_OF_PL23A         TRUE         LDQ20           48         PL23D         7         PCLKC7_0         Comp_OF_PL26B         TRUE         LDQ32           51         PL26A         6         PCLKT6_1         True_OF_PL26B         TRUE         LDQ32           52         PL26B         <	31	PL17A	7	-	True_OF_PL17B	TRUE	LDQ20
36         PL17D         7         -         Comp_OF_PL17C         -         LDQ20           37         PL20A         7         GR_PCLK7_1         True_OF_PL20B         TRUE         LDQ20           39         PL20C         7         GR_PCLK7_0         True_OF_PL20D         -         LDQ20           40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQ20           42         PL20D         7         -         Comp_OF_PL20C         -         LDQ20           43         PL23A         7         PCLKT7_1         True_OF_PL23B         TRUE         LDQ20           45         PL23C         7         PCLKT7_0         True_OF_PL23D         -         LDQ20           46         PL23B         7         PCLKC7_1         Comp_OF_PL23A         TRUE         LDQ20           48         PL23D         7         PCLKC7_1         Comp_OF_PL23C         -         LDQ20           49         PL26A         6         PCLKC6_1         True_OF_PL26B         TRUE         LDQ32           51         PL26C         6         PCLKC6_0         True_OF_PL26A         TRUE         LDQ32           54         PL26B <td< td=""><td>33</td><td>PL17C</td><td>7</td><td>-</td><td>True_OF_PL17D</td><td>-</td><td>LDQ20</td></td<>	33	PL17C	7	-	True_OF_PL17D	-	LDQ20
37         PL20A         7         GR_PCLK7_1         True_OF_PL20B         TRUE         LDQS20           39         PL20C         7         GR_PCLK7_0         True_OF_PL20D         -         LDQ20           40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQSN20           42         PL20D         7         -         Comp_OF_PL20C         -         LDQ20           43         PL23A         7         PCLKT7_1         True_OF_PL23B         TRUE         LDQ20           45         PL23C         7         PCLKT7_0         True_OF_PL23D         -         LDQ20           46         PL23B         7         PCLKC7_1         Comp_OF_PL23A         TRUE         LDQ20           48         PL23D         7         PCLKC7_1         Comp_OF_PL23A         TRUE         LDQ20           49         PL26A         6         PCLKC6_1         True_OF_PL26B         TRUE         LDQ32           51         PL26C         6         PCLKC6_0         True_OF_PL26A         TRUE         LDQ32           52         PL26B         6         PCLKC6_0         Comp_OF_PL26C         -         LDQ32           54         PL29A <td>34</td> <td>PL17B</td> <td>7</td> <td>-</td> <td>Comp_OF_PL17A</td> <td>TRUE</td> <td>LDQ20</td>	34	PL17B	7	-	Comp_OF_PL17A	TRUE	LDQ20
39         PL20C         7         GR_PCLK7_0         True_OF_PL20D         -         LDQ20           40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQSN20           42         PL20D         7         -         Comp_OF_PL20C         -         LDQ20           43         PL23A         7         PCLKT7_1         True_OF_PL23B         TRUE         LDQ20           45         PL23C         7         PCLKT7_0         True_OF_PL23D         -         LDQ20           46         PL23B         7         PCLKC7_1         Comp_OF_PL23A         TRUE         LDQ20           48         PL23D         7         PCLKC7_0         Comp_OF_PL23C         -         LDQ20           48         PL23D         7         PCLKC7_0         Comp_OF_PL26B         TRUE         LDQ20           49         PL26A         6         PCLKT6_1         True_OF_PL26B         TRUE         LDQ32           51         PL26C         6         PCLKC6_1         Comp_OF_PL26A         TRUE         LDQ32           52         PL26B         6         PCLKC6_0         Comp_OF_PL26C         -         LDQ32           54         PL29A	36	PL17D	7	-	Comp_OF_PL17C	-	LDQ20
40         PL20B         7         -         Comp_OF_PL20A         TRUE         LDQSN20           42         PL20D         7         -         Comp_OF_PL20C         -         LDQ20           43         PL23A         7         PCLKT7_1         True_OF_PL23B         TRUE         LDQ20           45         PL23C         7         PCLKT7_0         True_OF_PL23D         -         LDQ20           46         PL23B         7         PCLKC7_1         Comp_OF_PL23A         TRUE         LDQ20           48         PL23D         7         PCLKC7_0         Comp_OF_PL23C         -         LDQ20           49         PL26A         6         PCLKT6_1         True_OF_PL26B         TRUE         LDQ32           51         PL26C         6         PCLKT6_0         True_OF_PL26D         -         LDQ32           52         PL26B         6         PCLKC6_1         Comp_OF_PL26A         TRUE         LDQ32           54         PL26D         6         PCLKC6_0         True_OF_PL29B         TRUE         LDQ32           55         PL29A         6         GR_PCLK6_0         True_OF_PL29B         TRUE         LDQ32           57         PL29C	37	PL20A	7	GR_PCLK7_1	True_OF_PL20B	TRUE	LDQS20
42         PL20D         7         -         Comp_OF_PL20C         -         LDQ20           43         PL23A         7         PCLKT7_1         True_OF_PL23B         TRUE         LDQ20           45         PL23C         7         PCLKT7_0         True_OF_PL23D         -         LDQ20           46         PL23B         7         PCLKC7_1         Comp_OF_PL23A         TRUE         LDQ20           48         PL23D         7         PCLKC7_0         Comp_OF_PL23C         -         LDQ20           49         PL26A         6         PCLKT6_1         True_OF_PL26B         TRUE         LDQ32           51         PL26C         6         PCLKT6_0         True_OF_PL26D         -         LDQ32           52         PL26B         6         PCLKC6_1         Comp_OF_PL26A         TRUE         LDQ32           54         PL26D         6         PCLKC6_0         True_OF_PL29B         TRUE         LDQ32           55         PL29A         6         GR_PCLK6_0         True_OF_PL29B         TRUE         LDQ32           57         PL29C         6         GR_PCLK6_1         True_OF_PL29A         TRUE         LDQ32           58         PL29B	39	PL20C	7	GR_PCLK7_0	True_OF_PL20D	-	LDQ20
43         PL23A         7         PCLKT7_1         True_OF_PL23B         TRUE         LDQ20           45         PL23C         7         PCLKT7_0         True_OF_PL23D         -         LDQ20           46         PL23B         7         PCLKC7_1         Comp_OF_PL23A         TRUE         LDQ20           48         PL23D         7         PCLKC7_0         Comp_OF_PL23C         -         LDQ20           49         PL26A         6         PCLKT6_1         True_OF_PL26B         TRUE         LDQ32           51         PL26C         6         PCLKT6_0         True_OF_PL26D         -         LDQ32           52         PL26B         6         PCLKC6_1         Comp_OF_PL26A         TRUE         LDQ32           54         PL26D         6         PCLKC6_0         Comp_OF_PL26C         -         LDQ32           55         PL29A         6         GR_PCLK6_0         True_OF_PL29B         TRUE         LDQ32           57         PL29C         6         GR_PCLK6_1         True_OF_PL29A         TRUE         LDQ32           58         PL29B         6         -         Comp_OF_PL29C         -         LDQ32           60         PL29D <td>40</td> <td>PL20B</td> <td>7</td> <td>-</td> <td>Comp_OF_PL20A</td> <td>TRUE</td> <td>LDQSN20</td>	40	PL20B	7	-	Comp_OF_PL20A	TRUE	LDQSN20
45         PL23C         7         PCLKT7_0         True_OF_PL23D         -         LDQ20           46         PL23B         7         PCLKC7_1         Comp_OF_PL23A         TRUE         LDQ20           48         PL23D         7         PCLKC7_0         Comp_OF_PL23C         -         LDQ20           49         PL26A         6         PCLKT6_1         True_OF_PL26B         TRUE         LDQ32           51         PL26C         6         PCLKT6_0         True_OF_PL26D         -         LDQ32           52         PL26B         6         PCLKC6_1         Comp_OF_PL26A         TRUE         LDQ32           54         PL26D         6         PCLKC6_0         Comp_OF_PL26C         -         LDQ32           55         PL29A         6         GR_PCLK6_0         True_OF_PL29B         TRUE         LDQ32           57         PL29C         6         GR_PCLK6_1         True_OF_PL29D         -         LDQ32           58         PL29B         6         -         Comp_OF_PL29C         -         LDQ32           60         PL29D         6         -         Comp_OF_PL29C         -         LDQ32	42	PL20D	7	-	Comp_OF_PL20C	-	LDQ20
46       PL23B       7       PCLKC7_1       Comp_OF_PL23A       TRUE       LDQ20         48       PL23D       7       PCLKC7_0       Comp_OF_PL23C       -       LDQ20         49       PL26A       6       PCLKT6_1       True_OF_PL26B       TRUE       LDQ32         51       PL26C       6       PCLKT6_0       True_OF_PL26D       -       LDQ32         52       PL26B       6       PCLKC6_1       Comp_OF_PL26A       TRUE       LDQ32         54       PL26D       6       PCLKC6_0       Comp_OF_PL26C       -       LDQ32         55       PL29A       6       GR_PCLK6_0       True_OF_PL29B       TRUE       LDQ32         57       PL29C       6       GR_PCLK6_1       True_OF_PL29D       -       LDQ32         58       PL29B       6       -       Comp_OF_PL29A       TRUE       LDQ32         60       PL29D       6       -       Comp_OF_PL29C       -       LDQ32	43	PL23A	7	PCLKT7_1	True_OF_PL23B	TRUE	LDQ20
48         PL23D         7         PCLKC7_0         Comp_OF_PL23C         -         LDQ20           49         PL26A         6         PCLKT6_1         True_OF_PL26B         TRUE         LDQ32           51         PL26C         6         PCLKT6_0         True_OF_PL26D         -         LDQ32           52         PL26B         6         PCLKC6_1         Comp_OF_PL26A         TRUE         LDQ32           54         PL26D         6         PCLKC6_0         Comp_OF_PL26C         -         LDQ32           55         PL29A         6         GR_PCLK6_0         True_OF_PL29B         TRUE         LDQ32           57         PL29C         6         GR_PCLK6_1         True_OF_PL29D         -         LDQ32           58         PL29B         6         -         Comp_OF_PL29A         TRUE         LDQ32           60         PL29D         6         -         Comp_OF_PL29C         -         LDQ32	45	PL23C	7	PCLKT7_0	True_OF_PL23D	-	LDQ20
49       PL26A       6       PCLKT6_1       True_OF_PL26B       TRUE       LDQ32         51       PL26C       6       PCLKT6_0       True_OF_PL26D       -       LDQ32         52       PL26B       6       PCLKC6_1       Comp_OF_PL26A       TRUE       LDQ32         54       PL26D       6       PCLKC6_0       Comp_OF_PL26C       -       LDQ32         55       PL29A       6       GR_PCLK6_0       True_OF_PL29B       TRUE       LDQ32         57       PL29C       6       GR_PCLK6_1       True_OF_PL29D       -       LDQ32         58       PL29B       6       -       Comp_OF_PL29A       TRUE       LDQ32         60       PL29D       6       -       Comp_OF_PL29C       -       LDQ32	46	PL23B	7	PCLKC7_1	Comp_OF_PL23A	TRUE	LDQ20
51       PL26C       6       PCLKT6_0       True_OF_PL26D       -       LDQ32         52       PL26B       6       PCLKC6_1       Comp_OF_PL26A       TRUE       LDQ32         54       PL26D       6       PCLKC6_0       Comp_OF_PL26C       -       LDQ32         55       PL29A       6       GR_PCLK6_0       True_OF_PL29B       TRUE       LDQ32         57       PL29C       6       GR_PCLK6_1       True_OF_PL29D       -       LDQ32         58       PL29B       6       -       Comp_OF_PL29A       TRUE       LDQ32         60       PL29D       6       -       Comp_OF_PL29C       -       LDQ32	48	PL23D	7	PCLKC7_0	Comp_OF_PL23C	-	LDQ20
52       PL26B       6       PCLKC6_1       Comp_OF_PL26A       TRUE       LDQ32         54       PL26D       6       PCLKC6_0       Comp_OF_PL26C       -       LDQ32         55       PL29A       6       GR_PCLK6_0       True_OF_PL29B       TRUE       LDQ32         57       PL29C       6       GR_PCLK6_1       True_OF_PL29D       -       LDQ32         58       PL29B       6       -       Comp_OF_PL29A       TRUE       LDQ32         60       PL29D       6       -       Comp_OF_PL29C       -       LDQ32	49	PL26A	6	PCLKT6_1	True_OF_PL26B	TRUE	LDQ32
54       PL26D       6       PCLKC6_0       Comp_OF_PL26C -       LDQ32         55       PL29A       6       GR_PCLK6_0       True_OF_PL29B	51	PL26C	6	PCLKT6_0	True_OF_PL26D	-	LDQ32
55       PL29A       6       GR_PCLK6_0       True_OF_PL29B       TRUE       LDQ32         57       PL29C       6       GR_PCLK6_1       True_OF_PL29D       -       LDQ32         58       PL29B       6       -       Comp_OF_PL29A       TRUE       LDQ32         60       PL29D       6       -       Comp_OF_PL29C       -       LDQ32	52	PL26B	6	PCLKC6_1	Comp_OF_PL26A	TRUE	LDQ32
57       PL29C       6       GR_PCLK6_1       True_OF_PL29D -       LDQ32         58       PL29B       6       -       Comp_OF_PL29A TRUE LDQ32         60       PL29D       6       -       Comp_OF_PL29C -       LDQ32	54	PL26D	6	PCLKC6_0	Comp_OF_PL26C	-	LDQ32
58         PL29B         6         -         Comp_OF_PL29A         TRUE         LDQ32           60         PL29D         6         -         Comp_OF_PL29C         -         LDQ32	55	PL29A	6	GR_PCLK6_0	True_OF_PL29B	TRUE	LDQ32
60 PL29D 6 - Comp_OF_PL29C - LDQ32	57	PL29C	6	GR_PCLK6_1	True_OF_PL29D	-	LDQ32
	58	PL29B	6	-	Comp_OF_PL29A	TRUE	LDQ32
61 PL32A 6 - True_OF_PL32B TRUE LDQS32	60	PL29D	6	-	Comp_OF_PL29C	-	LDQ32
	61	PL32A	6	-	True_OF_PL32B	TRUE	LDQS32

63	PL32C	6	-	True_OF_PL32D	-		LDQ32
64	PL32B	6	-	Comp_OF_PL32A		TRUE	LDQSN32
66	PL32D	6	-	Comp_OF_PL32C	-		LDQ32
67	PL35A	6	-	True_OF_PL35B		TRUE	LDQ32
69	PL35C	6	-	True_OF_PL35D	-		LDQ32
70	PL35B	6	VREF1_6	Comp_OF_PL35A		TRUE	LDQ32
72	PL35D	6	-	Comp_OF_PL35C	-		LDQ32
73	PL38A	6	-	True_OF_PL38B		TRUE	LDQ44
75	PL38C	6	-	True_OF_PL38D	-		LDQ44
76	PL38B	6	-	Comp_OF_PL38A		TRUE	LDQ44
78	PL38D	6	-	Comp_OF_PL38C	-		LDQ44
79	PL41A	6	-	True_OF_PL41B		TRUE	LDQ44
81	PL41C	6	-	True_OF_PL41D	-		LDQ44
82	PL41B	6	-	Comp_OF_PL41A		TRUE	LDQ44
84	PL41D	6	-	Comp_OF_PL41C	-		LDQ44
85	PL44A	6	-	True_OF_PL44B		TRUE	LDQS44
87	PL44C	6	-	True_OF_PL44D	-		LDQ44
88	PL44B	6	-	Comp_OF_PL44A		TRUE	LDQSN44
90	PL44D	6	-	Comp_OF_PL44C	-		LDQ44
91	PL47A	6	-	True_OF_PL47B		TRUE	LDQ44
93	PL47B	6	-	Comp_OF_PL47A		TRUE	LDQ44
95	PL47C	6	LLC_GPLLOT_IN	True_OF_PL47D	-		LDQ44
96	PL47D	6	LLC_GPLLOC_IN	Comp_OF_PL47C	-		LDQ44
103	PB4A	8	D7/IO7	True_OF_PB4B	-		-
104	PB6A	8	D5/MISO2/IO5	True_OF_PB6B	-		-
106	PB4B	8	D6/IO6	Comp_OF_PB4A	-		-
107	PB6B	8	D4/MOSI2/IO4	Comp_OF_PB6A	_		-
109	PB9A	8	D3/IO3	True_OF_PB9B	_		-
110	PB11A	8	D1/MISO/IO1	True OF PB11B	_		-
112	PB9B	8	D2/IO2	Comp_OF_PB9A	_		-
113	PB11B	8	D0/MOSI/IO0	Comp_OF_PB11A	_		-
115	PB13A	8	SN/CSN	True_OF_PB13B	_		-
116	PB15A	8		/(True_OF_PB15B	_		-
118	PB13B	8	CS1N	Comp_OF_PB13A	-		-
119	PB15B	8	DOUT/CSON	Comp OF PB15A			-
121	PB18A	8	WRITEN	-	_		-
122	INITN	8	-	-	-		-
124	CCLK	8	MCLK/SCK	-	-		-
125	PROGRAMN	8	-	-	-		-
127	DONE	8	-	-	-		-
128	CFG_1	8	-	-	_		-
130	CFG_2	8	-	-	-		-
131	_ CFG_0	8	-	-	-		-
133	TDO	40	-	-	-		-
134	TCK	40	-	-	-		-
136	TDI	40	-	-	-		-
137	TMS	40	-	-	-		-
183	PR47D	3	LRC_GPLLOC_IN	Comp_OF_PR47C	-		RDQ44
184	PR47C	3	LRC_GPLLOT_IN	True_OF_PR47D	-		RDQ44
186	PR47B	3		Comp_OF_PR47A		TRUE	RDQ44

188	PR47A	3	-	True_OF_PR47B		TRUE	RDQ44
189	PR44D	3	-	Comp_OF_PR44C	-		RDQ44
191	PR44B	3	-	Comp_OF_PR44A		TRUE	RDQSN44
192	PR44C	3	-	True_OF_PR44D	-		RDQ44
194	PR44A	3	-	True_OF_PR44B		TRUE	RDQS44
195	PR41D	3	-	Comp_OF_PR41C	-		RDQ44
197	PR41B	3	-	Comp_OF_PR41A		TRUE	RDQ44
198	PR41C	3	-	True_OF_PR41D	-		RDQ44
200	PR41A	3	-	True_OF_PR41B		TRUE	RDQ44
201	PR38D	3	-	Comp_OF_PR38C	-		RDQ44
203	PR38B	3	-	Comp_OF_PR38A		TRUE	RDQ44
204	PR38C	3	-	True_OF_PR38D	-		RDQ44
206	PR38A	3	-	True_OF_PR38B		TRUE	RDQ44
207	PR35D	3	-	Comp_OF_PR35C	-		RDQ32
209	PR35B	3	VREF1_3	Comp_OF_PR35A		TRUE	RDQ32
210	PR35C	3	-	True_OF_PR35D	-		RDQ32
212	PR35A	3	-	True_OF_PR35B		TRUE	RDQ32
213	PR32D	3	-	Comp_OF_PR32C	-		RDQ32
215	PR32B	3	-	Comp_OF_PR32A		TRUE	RDQSN32
216	PR32C	3	-	True_OF_PR32D	-		RDQ32
218	PR32A	3	-	True_OF_PR32B		TRUE	RDQS32
219	PR29D	3	-	Comp_OF_PR29C	-		RDQ32
221	PR29B	3	-	Comp_OF_PR29A		TRUE	RDQ32
222	PR29C	3	GR_PCLK3_1	True_OF_PR29D	-		RDQ32
224	PR29A	3	GR_PCLK3_0	True_OF_PR29B		TRUE	RDQ32
225	PR26D	3	PCLKC3_0	Comp_OF_PR26C	-		RDQ32
227	PR26B	3	PCLKC3_1	Comp_OF_PR26A		TRUE	RDQ32
228	PR26C	3	PCLKT3_0	True_OF_PR26D	-		RDQ32
230	PR26A	3	PCLKT3_1	True_OF_PR26B		TRUE	RDQ32
231	PR23D	2	PCLKC2_0	Comp_OF_PR23C	-		RDQ20
233	PR23B	2	PCLKC2_1	Comp_OF_PR23A		TRUE	RDQ20
234	PR23C	2	PCLKT2_0	True_OF_PR23D	-		RDQ20
236	PR23A	2	PCLKT2_1	True_OF_PR23B		TRUE	RDQ20
237	PR20D	2	-	Comp_OF_PR20C	-		RDQ20
239	PR20B	2	-	Comp_OF_PR20A		TRUE	RDQSN20
240	PR20C	2	GR_PCLK2_0	True_OF_PR20D	-		RDQ20
242	PR20A	2	GR_PCLK2_1	True_OF_PR20B		TRUE	RDQS20
243	PR17D	2	-	Comp_OF_PR17C	-		RDQ20
245	PR17B	2	-	Comp_OF_PR17A		TRUE	RDQ20
246	PR17C	2	-	True_OF_PR17D	-		RDQ20
248	PR17A	2	-	True_OF_PR17B		TRUE	RDQ20
249	PR14D	2	-	Comp_OF_PR14C	-		RDQ20
251	PR14B	2	-	Comp_OF_PR14A		TRUE	RDQ20
252	PR14C	2	VREF1_2	True_OF_PR14D	-		RDQ20
254	PR14A	2	-	True_OF_PR14B		TRUE	RDQ20
255	PR11D	2	-	Comp_OF_PR11C	-		RDQ8
257	PR11B	2	-	Comp_OF_PR11A		TRUE	RDQ8
258	PR11C	2	-	True_OF_PR11D	-		RDQ8
260	PR11A	2	-	True_OF_PR11B		TRUE	RDQ8
261	PR8D	2	-	Comp_OF_PR8C	-		RDQ8

263	PR8B	2	-	Comp_OF_PR8A		TRUE	RDQSN8
264	PR8C	2	-	True_OF_PR8D	-		RDQ8
266	PR8A	2	-	True_OF_PR8B		TRUE	RDQS8
267	PR5D	2	-	Comp_OF_PR5C	-		RDQ8
269	PR5B	2	-	Comp_OF_PR5A		TRUE	RDQ8
270	PR5C	2	-	True_OF_PR5D	-		RDQ8
272	PR5A	2	-	True_OF_PR5B		TRUE	RDQ8
273	PR2D	2	-	Comp_OF_PR2C	-		RDQ8
275	PR2C	2	-	True_OF_PR2D	-		RDQ8
277	PR2B	2	SO_IN	Comp_OF_PR2A		TRUE	RDQ8
278	PR2A	2	-	True_OF_PR2B		TRUE	RDQ8
283	PT67B	1	-	Comp_OF_PT67A	-		-
285	PT65B	1	-	Comp_OF_PT65A	-		-
286	PT67A	1	-	True_OF_PT67B	-		-
288	PT65A	1	-	True_OF_PT65B	-		-
289	PT62B	1	-	Comp_OF_PT62A	-		-
291	PT60B	1	-	Comp_OF_PT60A	-		-
292	PT62A	1	-	True_OF_PT62B	-		-
294	PT60A	1	-	True_OF_PT60B	-		-
295	PT58B	1	-	Comp_OF_PT58A	-		-
297	PT56B	1	-	Comp_OF_PT56A	-		-
298	PT58A	1	-	True_OF_PT58B	-		-
300	PT56A	1	-	True_OF_PT56B	-		-
301	PT53B	1	-	Comp_OF_PT53A	-		-
303	PT51B	1	-	Comp_OF_PT51A	-		-
304	PT53A	1	-	True_OF_PT53B	-		-
306	PT51A	1	-	True_OF_PT51B	-		-
307	PT49B	1	-	Comp_OF_PT49A			-
309	PT47B	1	-	Comp_OF_PT47A	-		-
310	PT49A	1	-	True_OF_PT49B	-		-
312	PT47A	1	-	True_OF_PT47B	-		-
313	PT44B	1	-	Comp_OF_PT44A			-
315	PT42B	1	-	Comp_OF_PT42A			-
316	PT44A	1	-	True_OF_PT44B	-		-
318	PT42A	1	-	True_OF_PT42B	-		-
319	PT40B	1	-	Comp_OF_PT40A			-
321	PT38B	1	GR_PCLK1_1	Comp_OF_PT38A	-		-
322	PT40A	1	-	True_OF_PT40B	-		-
324	PT38A	1	GR_PCLK1_0	True_OF_PT38B	-		-
325	PT35B	1	PCLKC1_0	Comp_OF_PT35A			-
327	PT33B	1	PCLKC1_1	Comp_OF_PT33A	-		-
328	PT35A	1	PCLKT1_0	True_OF_PT35B	-		-
330	PT33A	1	PCLKT1_1	True_OF_PT33B	-		-
333	PT29B	0	PCLKCO_0	Comp_OF_PT29A			-
335	PT27B	0	PCLKCO_1	Comp_OF_PT27A	-		-
336	PT29A	0	PCLKTO_0	True_OF_PT29B	-		-
338	PT27A	0	PCLKTO_1	True_OF_PT27B	-		-
339	PT24B	0	GR_PCLK0_0	Comp_OF_PT24A			-
341	PT22B	0	- OD DC: 1/2 :	Comp_OF_PT22A	-		-
342	PT24A	0	GR_PCLK0_1	True_OF_PT24B	-		-

344	PT22A	0	-	True_OF_PT22B	-	-
345	PT20B	0	-	Comp_OF_PT20A	-	-
347	PT18B	0	-	Comp_OF_PT18A	-	-
348	PT20A	0	-	True_OF_PT20B	-	-
350	PT18A	0	-	True_OF_PT18B	_	-
351	PT15B	0	-	Comp_OF_PT15A	_	_
353	PT13B	0	-	Comp_OF_PT13A		_
354	PT15A	0	-	True_OF_PT15B	-	_
356	PT13A	0	-	True_OF_PT13B	-	_
357	PT11B	0	-	Comp_OF_PT11A	-	_
359	PT9B	0	-	Comp_OF_PT9A	_	_
360	PT11A	0	-	True_OF_PT11B	_	_
362	PT9A	0	-	True_OF_PT9B	_	_
363	PT6B	0	-	Comp_OF_PT6A	_	_
365	PT4B	0	_	Comp_OF_PT4A	_	_
366	PT6A	0	_	True_OF_PT6B	_	_
368	PT4A	0	_	True_OF_PT4B	_	_
0	GND	-	_	-	_	_
0	GND	_	_	_	_	_
0	GND	_	_	_	_	_
0	GND		_	_	_	
0	GND	_	_	_	_	_
0	GND		_	_	_	
0	GND	_	_	_	_	_
0	GND	-	-	-	-	-
0	GND	-	-	-	-	-
		-	-	-	-	-
0	GND	-	-	-	-	-
0	GND GND	-	-	-	-	-
0 0	GND	-	-	-	-	-
	GND	-	-	-	-	-
0 0		-	-	-	-	-
0	GND GND	-	-	-	-	-
		-	-	-	-	-
0	GND	-	-	-	-	-
0	GND	-	-	-	-	-
0	GND	-	-	-	-	-
0	GND	-	-	-	-	-
0	GND	-	-	-	-	-
0	GND	-	-	-	-	-
0	GND	-	-	-	-	-
0	GND	-	-	-	-	-
0	GND	-	-	-	-	-
0	GND	-	-	-	-	-
0	GND	-	-	-	-	-
0	VCC	-	-	-	-	-
0	VCC	-	-	-	-	-
0	VCC	-	-	-	-	-
0	VCC	-	-	-	-	-
0	VCC	-	-	-	-	-
0	VCC	-	-	-	-	-

0	VCCAUX	-	-	-	-	-
0	VCCAUX	-	-	-	-	-
0	VCCIO0	0	-	-	-	-
0	VCCIO0	0	-	-	-	-
0	VCCIO1	1	-	-	-	-
0	VCCIO1	1	-	-	-	-
0	VCCIO2	2	-	-	-	-
0	VCCIO2	2	-	-	-	-
0	VCCIO3	3	-	-	-	-
0	VCCIO3	3	-	-	-	-
0	VCCIO8	8	-	-	-	-
0	VCCIO6	6	-	-	-	-
0	VCCIO6	6	-	-	-	-
0	VCCIO7	7	-	-	-	-
0	VCCIO7	7	-	-	-	-

## CABGA256

В1

В2

С3

D3

C1

E3

C2

F3

D1

F4

E2

F5 G5

F2

G4

E1

F1

G3

G2 H3

Н5

J4

Н4

J5

G1

J3

Н2

K3 J1

Κ1

J2

K2

L1

M1

L2

M2

Κ4

L4

K5 L5

N1

L3

P2

М3

Р1

M4

R1

N3

N4

R2

Р3

T2

Р4

R4

R3

Т3

R5 M5

T4

N5

M6

N6 P6

Р5

Т6

R7

R6 P7

Ν7

T7

M7

T8

R8

Ν8

Р8

M8 M9

Т9

N9

R9 P9

P10

R10

N10

M10

T10

R11

T11

P12

P11 N11 M11

N12

T13

M12

R12

T14

R14

R13

P13

T15

P14

R15

N13

N14

R16

M13

P16

M14

P15

L14

N16

L12 K12

L13

K13

M15

L15

M16

L16

K15

J15

K16

J16

K14

H15

J14

G16 J12

H13

J13

H12

H14

G15

G14

F16

E16

G13

F15

G12 F12 E15

F13

D16

F14

C15

E14

C16

D14

C14

B15

B16

A15

A14

B14

A13

E13

C13

D13 B13

E12

C12

D12

B12

A12

E11

A11

D11 C11

E10

B11

D10

C10

A10

B10

A9 E9

C9

D9

В9

В8

D8

C8 E8

Α8

В7

Α7

C7

D7

B6 E7 C6

D6

Α6

E6

Α5

В5 D5

C5 E5

В4

D4

C4

E4

Α4 В3

А3

Α2

A16

H16

T16 D15

N15

T12

G10

H10 J10

K10

F9

Н9

J9

К9

F8 G8

Н8 J8

К8

Κ7

Κ6

T5

D2

N2 Α1

Н1

T1

L10

G9

L9

L8 G7

G6

G11

L7

F7

F6

F11

F10

H11

J11

K11

L11

L6

J7

J6

Н7

Н6