

SG48 Pin Out For iCE5LP-1K, -2K, -4K & iCE40UP-5K
Revision 0.3 - Add in UltraPlus Devices
Revision 1.1 - Fix RGB pins, swapped pins 39 & 41
Updated March 16, 2018

FNC	Pin Type	BANK	Differential Pair	iCE5LP-1K	iCE5LP-2K	iCE5LP-4K	iCE40UP-5K
				SG48	SG48	SG48	SG48
IOB_0a	DPIO	2	TRUE_of_IOB_1b	46	46	46	46
IOB_2a	DPIO	2	TRUE_of_IOB_3b	47	47	47	47
IOB_3b_G6	DPIO / GBIN	2	COMP_of_IOB_2a	44	44	44	44
IOB_4a	DPIO	2	TRUE_of_IOB_5b	48	48	48	48
IOB_5b	DPIO	2	COMP_of_IOB_4a	45	45	45	45
IOB_6a	DPIO	2	TRUE_of_IOB_7b	2	2	2	2
IOB_8a	PIO	2	TRUE_of_IOB_9b	4	4	4	4
IOB_9b	PIO	2	COMP_of_IOB_8a	3	3	3	3
creset_b	CONFIG	1		8	8	8	8
IOB_13b	PIO	1		6	6	6	6
CDONE	CONFIG	1		7	7	7	7
IOB_16a	PIO	1		9	9	9	9
IOB_18a	PIO	1		10	10	10	10
IOB_20a	PIO	1		11	11	11	11
IOB_22a	PIO	1	TRUE_of_IOB_23b	12	12	12	12
IOB_23b	PIO	1	COMP_of_IOB_22a	21	21	21	21
IOB_24a	PIO	1		13	13	13	13
IOB_25b_G3	PIO / GBIN	1		20	20	20	20
IOB_29b	PIO	1		19	19	19	19
IOB_31b	DPIO	1	COMP_of_IOB_30a	18	18	18	18
IOB_32a_SPI_SO	PIO / CONFIG_SPI	1		14	14	14	14
IOB_33b_SPI_SI	PIO / CONFIG_SPI	1		17	17	17	17
IOB_34a_SPI_SCK	PIO / CONFIG_SPI	1		15	15	15	15
IOB_35b_SPI_CSN	PIO / CONFIG_SPI	1		16	16	16	16
IOT_36b	PIO	0	COMP_of_IOT_37a	25	25	25	25
IOT_37a	PIO	0	TRUE_of_IOT_36b	23	23	23	23
IOT_38b	PIO	0	COMP_of_IOT_39a	27	27	27	27
IOT_39a	PIO	0	TRUE_of_IOT_38b	26	26	26	26
IOT_41a	PIO	0		28	28	28	28
IOT_42b	PIO	0	COMP_of_IOT_43a	31	31	31	31
IOT_43a	PIO	0	TRUE_of_IOT_42b	32	32	32	32
IOT_44b	PIO	0	COMP_of_IOT_45a	34	34	34	34
IOT_45a_G1	PIO / GBIN	0	TRUE_of_IOT_44b	37	37	37	37
IOT_46b_G0	PIO / GBIN	0		35	35	35	35
IOT_48b	PIO	0	COMP_of_IOT_49a	36	36	36	36
IOT_49a	PIO	0	TRUE_of_IOT_48b	43	43	43	43
IOT_50b	PIO	0	COMP_of_IOT_51a	38	38	38	38
IOT_51a	PIO	0	TRUE_of_IOT_50b	42	42	42	42
RGB2	LED	0		39	39	39	41
RGB1	LED	0		40	40	40	40
RGB0	LED	0		41	41	41	39
VCC	VCC	VCC		5	5	5	5
VCC	VCC	VCC		30	30	30	30
VCCIO_0	VCCIO	0		33	33	33	33
VCCIO_2	VCCIO	2		1	1	1	1
SPI_Vccio1	VCCIO	1		22	22	22	22
VCCPLL	VCCPLL	VCCPLL		29	29	29	29
VPP_2V5	VPP	VPP		24	24	24	24

*SG48 GND is connected to package paddle