K64 (100qfp)	Pin Name	DEFAULT	ALT0	ALT1	ALT2	ALT3	ALT4	ALT5	ALT6	ALT7	EZPORT	Kinetis
1	PTE0/CLKOUT32K	ADC1_SE4a	ADC1_SE4a	PTE0/CLKOUT32K	SPI1_PCS1	UART1_TX	SDHC0_D1	TRACE_CLKOUT	I2C1_SDA	RTC_CLKOUT		1
2	PTE1/LLWU_P0	ADC1_SE5a	ADC1_SE5a	PTE1/LLWU_P0	SPI1_SOUT	UART1_RX	SDHC0_D0	TRACE_D3	I2C1_SCL	SPI1_SIN		2
3	PTE2/LLWU_P1	ADC0_DP2/ADC1_SE6a	ADC0_DP2/ADC1_SE6a	PTE2/LLWU_P1	SPI1_SCK	UART1_CTS_b	SDHC0_DCLK	TRACE_D2				3
4	PTE3	ADC0_DM2/ADC1_SE7a	ADC0_DM2/ADC1_SE7a	PTE3	SPI1_SIN	UART1_RTS_b	SDHC0_CMD	TRACE_D1		SPI1_SOUT		4
5	PTE4/LLWU_P2	DISABLED		PTE4/LLWU_P2	SPI1_PCS0	UART3_TX	SDHC0_D3	TRACE_D0				12
6	PTE5	DISABLED		PTE5	SPI1_PCS2	UART3_RX	SDHC0_D2			FTM3_CH0		13
7	PTE6	DISABLED		PTE6	SPI1_PCS3	UART3_CTS_b	I2S0_MCLK			FTM3_CH1	USB0_SOF_OUT	14
8	VDD	VDD	VDD									23
9	VSS	VSS	VSS									24
10	USB0_DP	USB0_DP	USB0_DP									33
11	USB0_DM	USB0_DM	USB0_DM									34
12	VOUT33	VOUT33	VOUT33									35
13	VREGIN	VREGIN	VREGIN									37
14	ADC0_DP1	ADC0_DP1	ADC0_DP1									53
15	ADC0_DM1	ADC0_DM1	ADC0_DM1									54
16	ADC1_DP1	ADC1_DP1	ADC1_DP1									55
17	ADC1_DM1	ADC1_DM1	ADC1_DM1									56
18	ADC0_DP0/ADC1_DP3	ADC0_DP0/ADC1_DP3	ADC0_DP0/ADC1_DP3									59
19	ADC0_DM0/ADC1_DM3	ADC0_DM0/ADC1_DM3	ADC0_DM0/ADC1_DM3									60
20	ADC1_DP0/ADC0_DP3	ADC1_DP0/ADC0_DP3	ADC1_DP0/ADC0_DP3									61
21	ADC1_DM0/ADC0_DM3	ADC1_DM0/ADC0_DM3	ADC1_DM0/ADC0_DM3									62
22	VDDA	VDDA	VDDA									63
23	VREFH	VREFH	VREFH									64
24	VREFL	VREFL	VREFL									66
25	VSSA	VSSA	VSSA									67
26	VREF_OUT/CMP1_IN5/CMP0_IN5/ADC1_SE18	VREF_OUT/CMP1_IN5/CMP0_IN5/ADC1_SE18	VREF_OUT/CMP1_IN5/CMP0_IN5/ADC1_SE18									88
27	DAC0_OUT/CMP1_IN3/ADC0_SE23	DAC0_OUT/CMP1_IN3/ADC0_SE23	DAC0_OUT/CMP1_IN3/ADC0_SE23									95
28	XTAL32	XTAL32	XTAL32									103
29	EXTAL32	EXTAL32	EXTAL32									104
30	VBAT	VBAT	VBAT									105
31	PTE24	ADC0_SE17	ADC0_SE17	PTE24		UART4_TX		I2C0_SCL	EWM_OUT_b			116
32	PTE25	ADC0_SE18	ADC0_SE18	PTE25		UART4_RX		I2C0_SDA	EWM_IN			117
33	PTE26/CLKOUT32K	DISABLED		PTE26/CLKOUT32K	ENET_1588_CLKIN	UART4_CTS_b			RTC_CLKOUT	USB0_CLKIN		118
34	PTA0	JTAG_TCLK/SWD_CLK/EZP_CLK		PTA0	UART0_CTS_b/UART0_COL_b	FTM0_CH5				JTAG_TCLK/SWD_CLK	EZP_CLK	121
35	PTA1	JTAG_TDI/EZP_DI		PTA1	UART0_RX	FTM0_CH6				JTAG_TDI	EZP_DI	122
36	PTA2	JTAG_TDO/TRACE_SWO/EZP_DO		PTA2	UART0_TX	FTM0_CH7				JTAG_TDO/TRACE_SWO	EZP_DO	123
37	PTA3	JTAG_TMS/SWD_DIO		PTA3	UART0_RTS_b	FTM0_CH0				JTAG_TMS/SWD_DIO		124
38	PTA4/LLWU_P3	NMI_b/EZP_CS_b		PTA4/LLWU_P3		FTM0_CH1				NMI_b	EZP_CS_b	125
39	PTA5	DISABLED		PTA5	USB0_CLKIN	FTM0_CH2	RMII0_RXER/MII0_RXER	CMP2_OUT	I2S0_TX_BCLK	JTAG_TRST_b		126
40	VDD	VDD	VDD									127
41	VSS	VSS	VSS									128
42	PTA12	CMP2_IN0	CMP2_IN0	PTA12	CAN0_TX	FTM1_CH0	RMII0_RXD1/MII0_RXD1	I2C2_SCL	I2S0_TXD0	FTM1_QD_PHA	137
43	PTA13/LLWU_P4	CMP2_IN1	CMP2_IN1	PTA13/LLWU_P4	CAN0_RX	FTM1_CH1	RMII0_RXD0/MII0_RXD0	I2C2_SDA	I2S0_TX_FS	FTM1_QD_PHB	138
44	PTA14	DISABLED		PTA14	SPI0_PCS0	UART0_TX	RMII0_CRS_DV/MII0_RXDV		I2S0_RX_BCLK	I2S0_TXD1	139
45	PTA15	DISABLED		PTA15	SPI0_SCK	UART0_RX	RMII0_TXEN/MII0_TXEN		I2S0_RXD0		140
46	PTA16	DISABLED		PTA16	SPI0_SOUT	UART0_CTS_b/UART0_COL_b	RMII0_TXD0/MII0_TXD0		I2S0_RX_FS	I2S0_RXD1	142
47	PTA17	ADC1_SE17	ADC1_SE17	PTA17	SPI0_SIN	UART0_RTS_b	RMII0_TXD1/MII0_TXD1		I2S0_MCLK		143
48	VDD	VDD	VDD									149
49	VSS	VSS	VSS									150
50	PTA18	EXTAL0	EXTAL0	PTA18		FTM0_FLT2	FTM_CLKIN0					151
51	PTA19	XTAL0	XTAL0	PTA19		FTM1_FLT0	FTM_CLKIN1			LPTMR0_ALT1		152
52	RESET_b	RESET_b	RESET_b									164
53	PTB0/LLWU_P5	ADC0_SE8/ADC1_SE8	ADC0_SE8/ADC1_SE8	PTB0/LLWU_P5	I2C0_SCL	FTM1_CH0	RMII0_MDIO/MII0_MDIO		FTM1_QD_PHA		165
54	PTB1	ADC0_SE9/ADC1_SE9	ADC0_SE9/ADC1_SE9	PTB1	I2C0_SDA	FTM1_CH1	RMII0_MDC/MII0_MDC		FTM1_QD_PHB		166
55	PTB2	ADC0_SE12	ADC0_SE12	PTB2	I2C0_SCL	UART0_RTS_b	ENET0_1588_TMR0		FTM0_FLT3		167
56	PTB3	ADC0_SE13	ADC0_SE13	PTB3	I2C0_SDA	UART0_CTS_b/UART0_COL_b	ENET0_1588_TMR1		FTM0_FLT0		175
57	PTB9	DISABLED		PTB9	SPI1_PCS1	UART3_CTS_b		FB_AD20			176
58	PTB10	ADC1_SE14	ADC1_SE14	PTB10	SPI1_PCS0	UART3_RX		FB_AD19	FTM0_FLT1		177
59	PTB11	ADC1_SE15	ADC1_SE15	PTB11	SPI1_SCK	UART3_TX		FB_AD18	FTM0_FLT2		178
60	VSS	VSS	VSS									179
61	VDD	VDD	VDD									
62	PTB16	DISABLED		PTB16	SPI1_SOUT	UART0_RX	FTM_CLKIN0	FB_AD17	EWM_IN		187
63	PTB17	DISABLED		PTB17	SPI1_SIN	UART0_TX	FTM_CLKIN1	FB_AD16	EWM_OUT_b		188
64	PTB18	DISABLED		PTB18	CAN0_TX	FTM2_CH0	I2S0_TX_BCLK	FB_AD15	FTM2_QD_PHA		189
65	PTB19	DISABLED		PTB19	CAN0_RX	FTM2_CH1	I2S0_TX_FS	FB_OE_b	FTM2_QD_PHB		192
66	PTB20	DISABLED		PTB20	SPI2_PCS0			FB_AD31	CMP0_OUT		193
67	PTB21	DISABLED		PTB21	SPI2_SCK			FB_AD30	CMP1_OUT		196
68	PTB22	DISABLED		PTB22	SPI2_SOUT			FB_AD29	CMP2_OUT		197
69	PTB23	DISABLED		PTB23	SPI2_SIN	SPI0_PCS5		FB_AD28			198
70	PTC0	ADC0_SE14	ADC0_SE14	PTC0	SPI0_PCS4	PDB0_EXTRG	USB0_SOF_OUT	FB_AD14	I2S0_TXD1		199
71	PTC1/LLWU_P6	ADC0_SE15	ADC0_SE15	PTC1/LLWU_P6	SPI0_PCS3	UART1_RTS_b	FTM0_CH0	FB_AD13	I2S0_TXD0		200
72	PTC2	ADC0_SE4b/CMP1_IN0	ADC0_SE4b/CMP1_IN0	PTC2	SPI0_PCS2	UART1_CTS_b	FTM0_CH1	FB_AD12	I2S0_TX_BCLK		201
73	PTC3/LLWU_P7	CMP1_IN1	CMP1_IN1	PTC3/LLWU_P7	SPI0_PCS1	UART1_RX	FTM0_CH2	CLKOUT			204
74	VSS	VSS	VSS									205
75	VDD	VDD	VDD									
76	PTC4/LLWU_P8	DISABLED		PTC4/LLWU_P8	SPI0_PCS0	UART1_TX	FTM0_CH3	FB_AD11	CMP1_OUT		212
77	PTC5/LLWU_P9	DISABLED		PTC5/LLWU_P9	SPI0_SCK	LPTMR0_ALT2	I2S0_RXD0	FB_AD10	CMP0_OUT	FTM0_CH2	214
78	PTC6/LLWU_P10	CMP0_IN0	CMP0_IN0	PTC6/LLWU_P10	SPI0_SOUT	PDB0_EXTRG	I2S0_RX_BCLK	FB_AD9	I2S0_MCLK		215
79	PTC7	CMP0_IN1	CMP0_IN1	PTC7	SPI0_SIN	USB0_SOF_OUT	I2S0_RX_FS	FB_AD8			216
80	PTC8	ADC1_SE4b/CMP0_IN2	ADC1_SE4b/CMP0_IN2	PTC8		FTM3_CH4	I2S0_MCLK	FB_AD7			217
81	PTC9	ADC1_SE5b/CMP0_IN3	ADC1_SE5b/CMP0_IN3	PTC9		FTM3_CH5	I2S0_RX_BCLK	FB_AD6	FTM2_FLT0		218
82	PTC10	ADC1_SE6b	ADC1_SE6b	PTC10	I2C1_SCL	FTM3_CH6	I2S0_RX_FS	FB_AD5			220
83	PTC11/LLWU_P11	ADC1_SE7b	ADC1_SE7b	PTC11/LLWU_P11	I2C1_SDA	FTM3_CH7	I2S0_RXD1	FB_RW_b			221
84	PTC12	DISABLED		PTC12		UART4_RTS_b		FB_AD27	FTM3_FLT0		222
85	PTC13	DISABLED		PTC13		UART4_CTS_b		FB_AD26			223
86	PTC14	DISABLED		PTC14		UART4_RX		FB_AD25			226
87	PTC15	DISABLED		PTC15		UART4_TX		FB_AD24			229
88	VSS	VSS	VSS									
89	VDD	VDD	VDD									230
90	PTC16	DISABLED		PTC16		UART3_RX	ENET0_1588_TMR0	FB_CS5_b/FB_TSIZ1/FB_BE23_16_BLS15_8_b			233
91	PTC17	DISABLED		PTC17		UART3_TX	ENET0_1588_TMR1	FB_CS4_b/FB_TSIZ0/FB_BE31_24_BLS7_0_b			234
92	PTC18	DISABLED		PTC18		UART3_RTS_b	ENET0_1588_TMR2	FB_TBST_b/FB_CS2_b/FB_BE15_8_BLS23_16_b			235
93	PTD0/LLWU_P12	DISABLED		PTD0/LLWU_P12	SPI0_PCS0	UART2_RTS_b	FTM3_CH0	FB_ALE/FB_CS1_b/FB_TS_b			237
94	PTD1	ADC0_SE5b	ADC0_SE5b	PTD1	SPI0_SCK	UART2_CTS_b	FTM3_CH1	FB_CS0_b		I2C0_SCL	238
95	PTD2/LLWU_P13	DISABLED		PTD2/LLWU_P13	SPI0_SOUT	UART2_RX	FTM3_CH2	FB_AD4		I2C0_SDA	239
96	PTD3	DISABLED		PTD3	SPI0_SIN	UART2_TX	FTM3_CH3	FB_AD3			240
97	PTD4/LLWU_P14	DISABLED		PTD4/LLWU_P14	SPI0_PCS1	UART0_RTS_b	FTM3_CH4	FB_AD2	EWM_IN	SPI1_PCS0	241
98	PTD5	ADC0_SE6b	ADC0_SE6b	PTD5	SPI0_PCS2	UART0_CTS_b/UART0_COL_b	FTM0_CH5	FB_AD1	EWM_OUT_b	SPI1_SCK	242
99	PTD6/LLWU_P15	ADC0_SE7b	ADC0_SE7b	PTD6/LLWU_P15	SPI0_PCS3	UART0_RX	FTM0_CH6	FB_AD0	FTM0_FLT0	SPI1_SOUT	245
100	PTD7	DISABLED		PTD7	CMT_IRO	UART0_TX	FTM0_CH7		FTM0_FLT1	SPI1_SIN	250

Color assignment

Yellow	Board signals
Green	I/O Header Freescale
Orange	Arduino Compatible
Dark blue	RF Module
Light blue	BT Module