

XO-1.75 EC Pin Assignments

Pin	Special Func.	GPIO	Reset strap ?	ECRST# (L/H)	XO-1.75 (CL2) Signal Name	Dir	Description
1	KS16 / EDI_DI	GPIO00		IE(PU) / IE(PU)	EDI_DIN_R	I	SOC/ISP programming interface
2	KS17 / EDI_DO	GPIO01		IE(PU) / IE(PU)	EDI_DO_R	O	SOC/ISP programming interface
3	KSO4	GPIO02		IE(PU) / IE(PU)	SOC_RESET#	O	Open drain SOC reset, not system reset
4	KSO5	GPIO03		IE(PU) / IE(PU)	PWR_LMT_ON	I	Low-end (solar) power limiting active
5	KSO6	GPIO04	H	IE(PU) / IE(PU)	EN_+1.8V_GPIO#	O	Enable +1.8V_GPIO
6	KS07	GPIO05		HIZ / HIZ	EN_USB_PWR	O	Enable +3.3V_USB to USB Hub
7	OWM1	GPIO06		HIZ / HIZ	CHRG_DQ	I/O	Battery 1-Wire interface
8	PWM1	GPIO07		HIZ / HIZ	LED_BAT_R	O	Battery LED Red
9	AD0	GPIO8		HIZ / HIZ	EC_ID0	AI	Board ID 0
10	AD1	GPIO9		HIZ / HIZ	EC_ID1	AI	Board ID 1
11	AD2	GPIOA		HIZ / HIZ	CHRG_AC_IN	AI	Voltage at DC Line In
12	AD3	GPIOB		HIZ / HIZ	Q32 pin 1	AI/I	Backup OLS (unused)
13	AD4	GPIOC		HIZ / HIZ	ADP_CUR_SEN	AI	Adapter current sense
14	AD5	GPIOD		HIZ / HIZ	CHRG_VOL_SNS	AI	Main rail voltage sense
15	AVCC						
16	DA0	GPIOE		HIZ / HIZ	LV_SET	AO	MPPT low-end setpoint control
17	DA1	GPIOF		HIZ / HIZ	TP173	AO/O	unused
18	AGND						
19	SPL_CLK	GPIO10		HIZ / IE	SDI_CLK	I	EC ↔ SOC Communication
20	SPL_DO	GPIO11		HIZ / IE	SDI_MOSI	O	EC ↔ SOC Communication
21	SPL_DI	GPIO12		HIZ / IE	SDI_MISO	I	EC ↔ SOC Communication
22	SPL_CS#	GPIO13		HIZ / IE	SDI_CS#	I	EC ↔ SOC Communication
23	NC						
24	VCC						
25	PWM0	GPIO14		HIZ / HIZ	OLS_ANODE	O	Outdoor Light Sensor anode
26	PWM2	GPIO15		HIZ / HIZ	OLS_CATHODE	O	Outdoor Light Sensor cathode
27	PWM3	GPIO16		HIZ / HIZ	LED_BAT_G	O	Battery LED Green
28	CEC	GPIO17		HIZ / HIZ	EN_VCORE_PWR	O	Enable SOC core power
29	CIRRX / KSO16	GPIO18		HIZ / HIZ	EC_IRQ#	O	EC interrupt to the SOC
30	DS0	GPIO19		HIZ / HIZ	LED_PWR	O	Power LED
31	DS1	GPIO1A		HIZ / HIZ	EN_DCON_PWR#	O	Enable DCON power (+2.5V and +1.8V)
32	CIRTX / KSO17	GPIO1B		HIZ / HIZ	SYS_RESET#	I	System reset input
33	IRQ#	GPIO1C		PU / PU	ALL_PWRGD	I	System power good input
34	RX	GPIO1D		HIZ / HIZ	EC_RX	I	UART In

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35	TX	GPIO1E		HIZ / HIZ	EC_TX	O	UART Out
36	RESET#			IE / IE	EC_RST#	O	EC reset
37	KS00	GPIO1F	H	IE(PU)/IE(PU)	EN_+1.8V_PMIC#	O	Enable +1.8V_PMIC
38	KS01	GPIO20	H	IE(PU)/IE(PU)	EN_SD1_PWR#	O	Enable power for internal SD/eMMC
39	KS02	GPIO21	H	IE(PU)/IE(PU)	EN_SD2_PWR#	O	Enable power for external SD slot
40	KS03	GPIO22	H	IE(PU)/IE(PU)	EN_+3.3V_SOC#	O	Enable +3.3V_SOC
41	KS08	GPIO23		HIZ / HIZ	CHRG_AC_OK	I	External DC Input present
42	KS09	GPIO24		HIZ / HIZ	EN_MAIN_PWR	O	Enable main power plane
43	KS010	GPIO25		HIZ / HIZ	EC_SPL_ACK	O	EC->SOC command acknowledge
44	KS011	GPIO26		HIZ / HIZ	EN_+3.3V_NAND#	O	Enable +3.3V_NAND
45	KS012	GPIO27		HIZ / HIZ	EN_+1.5V_DDR3	O	Enable +1.5V_DDR3
46	KS013	GPIO28		HIZ / HIZ	EN_+1.2V	O	Enable +1.2V
47	KS014	GPIO29		HIZ / HIZ	OLS#	O	Indicates use of the Outdoor Light Sensor
48	KS015	GPIO2A		HIZ / HIZ	PWR_BTN#	I	Input from power button
49	CLK_IN				EC_XTL_IN	AI	32KHz crystal connection
50	CLK_OUT				EC_XTL_OUT	AO	32KHz crystal connection
51	SDA0	GPIO2D		HIZ / IE	CHG_SDA	I/O	Battery Charger SMBus interface data
52	SCL0	GPIO2E		HIZ / IE	CHG_SCL	I/O	Battery Charger SMBus interface clock
53	KS12	GPIO2F		IE(PU)/IE(PU)	EC_SPL_CMD	I	SOC->EC command flag
54	KS13	GPIO30		IE(PU)/IE(PU)	TP175	I/O	unused
55	KS10	GPIO31		IE(PU)/IE(PU)	RESTORE	I	Enable EC recovery mode
56	KS11	GPIO32		IE(PU)/IE(PU)	EN_KBD_PWR#	O	Enable keyboard/touchpad power
57	KS14 / EDI_CS	GPIO33		IE(PU)/IE(PU)	EDI_CS_R#	I	SOC/ISP programming interface
58	KS15 / EDI_CLK	GPIO34		IE(PU)/IE(PU)	EDI_CLK_R	I	SOC/ISP programming interface
59	SDA1 / PS2_DAT3	GPIO35		HIZ / HIZ	TPD_DAT	I/O	Touchpad PS/2 interface data
60	VCC				TPD_CLK	I/O	Touchpad PS/2 interface clock
61	SCL1 / PS2_CLK3	GPIO36		HIZ / HIZ	TPD_CLK	I/O	Touchpad PS/2 interface clock
62	GND				KBD_CLK	I/O	Keyboard PS/2 interface clock
63	PS2_CLK1	GPIO37		HIZ / HIZ	KBD_DAT	I/O	Keyboard PS/2 interface data
64	PS2_DAT1	GPIO38		HIZ / HIZ	KBD_DAT	I/O	Keyboard PS/2 interface data

HIZ – High impedance
 IE – Input enabled
 IE(PU) – Input enabled w. internal pullup