

1 G120E SoM Pinout

Many signals on the G120 are multiplexed to offer multiple functions on a single pin. Developers can decide on the pin functionality to be used through the provided libraries. Any pin with no name, function, or note must be left unconnected.

Pin	Name	Function	Pin	Name	Function	Pin	Name	Function
1		3.3 V	36		GND	J1	P3.22	
2		GND	37		3.3 V	J2	P2.1	MODE
3	P0.4	CAN2 RD	38	P3.30		J3	P2.23	TOUCH XR
4	P0.5	CAN2 TD	39	P3.26	PWM8	J4	P3.31	TOUCH YD
5	P0.3	COM1 RX	40	P3.17	PWM1	J5	P3.29	PWM11
6	P0.2	COM1 TX	41		USBC D-	J6	P4.31	
7	P0.22	LDR1	42		USBC D+	J7		
8	P0.24	TOUCH YU	43		ETH PHY RD-	J8		
9	P0.25	COM4 TX	44		ETH PHY RD+	J9	P3.19	PWM3
10	P0.26	COM4 RX	45		ETH PHY TD-	J10	P3.20	PWM4
11	P0.23	TOUCH XL	46		ETH PHY TD+	J11	P3.21	PWM5
12	P4.29		47	P0.18	SPI1 MOSI	J12	P3.28	PWM10
13	P4.28		48	P0.17	SPI1 MISO	J13		ETH PHY SPEED
14 ¹	P0.28	I2C SCL	49	P2.30		J14		ETH PHY LINK
15 ¹	P0.27	I2C SDA	50	P0.15	SPI1 SCK	J15		GND
16	P3.16	PWM0	51	P0.11	COM3 RX	T1	P2.12	LCD R0
17	P3.24	PWM6	52	P0.10	COM3 TX	T2	P2.6	LCD R1
18	P3.25	PWM7	53	P2.10	LDR0	T3	P2.7	LCD R2
19	P1.19		54	P0.6	COM2 RTS	T4	P2.8	LCD R3
20	P2.21		55	P0.16	COM2 RX	T5	P2.9	LCD R4
21	P2.25		56	P2.31		T6	P1.20	LCD G0
22	P2.22		57	P3.18	COM2 CTS	T7	P1.21	LCD G1
23	P0.1	CAN1 TD	58		SPI2 SCK	T8	P1.22	LCD G2
24	P2.26		59		SPI2 MOSI	T9	P1.23	LCD G3
25	P0.0	CAN1 RD	60	P2.0	COM2 TX	T10	P1.24	LCD G4
26	P1.30	ADC4	61		SPI2 MISO	T11	P1.25	LCD G5
27	P2.27		62	P1.12	SD D3	T12	P2.13	LCD B0
28		VBAT	63	P1.11	SD D2	T13	P1.26	LCD B1
29		USBH D-	64	P1.7	SD D1	T14	P1.27	LCD B2
30		USBH D+	65	P1.2	SD CLK	T15	P1.28	LCD B3
31	P0.12	ADC6	66	P1.6	SD D0	T16	P1.29	LCD B4
32	P0.13	ADC7	67	P1.3	SD CMD	T17	P2.2	LCD CLK
33	P1.31	ADC5	68		SD PWR	T18	P2.4	LCD OE
34		3.3 V	69		GND	T19	P2.5	LCD HS
35	P3.27	PWM9	70		RESET	T20	P2.3	LCD VS

¹Open drain requiring a 2.2 kΩ pull-up resistor