

CRAMPS Interface

AM335 Pin	CRAMPS Pin	Exp Pin	GPIO	Chip Pin	BBB Pin
UART2_RXD	FET6 (Fan2)		0_02	A17	P9_22
UART2_TXD	FET4 (E2Htr)		0_03	B17	P9_21
I2C1_SDA	E1_DIR		0_04	B16	P9_18
I2C1_SCL	E1_STEP		0_05	A16	P9_17
GPIO0_7	SPI_CS1	U_STEP	0_07	C18	P9_42
I2C2_SDA	SDA	Data	0_12	D18	P9_20
I2C2_SCL	SCL	Data	0_13	D17	P9_19
UART1_RXD	E2_DIR		0_14	D16	P9_26
UART1_TXD	E2_STEP		0_15	D15	P9_24
CLKOUT2	FET5 (Fan1)		0_20	D14	P9_41
EHRPWM2A	Z_STEP		0_22	U10	P8_19
EHRPWM2B	X_STEP		0_23	T10	P8_13
GPIO0_26	Y_DIR		0_26	T11	P8_14
GPIO0_27	ESTOP		0_27	U12	P8_26
UART4_RXD	Z-MAX		0_30	T17	P9_11
UART4_TXD	Z-MIN		0_31	U17	P9_13
GPIO1_12	X_DIR		1_12	T12	P8_12
GPIO1_13	FET1 (Bed)		1_13	R12	P8_11
GPIO1_14	SPI_SPARE	U_DIR	1_14	V13	P8_16
GPIO1_15	Y_STEP		1_15	U13	P8_15
GPIO1_16	FET2 (E0Htr)		1_16	R13	P9_15
GPIO1_17	MACHINE_PWR		1_17	V14	P9_23
EHRPWM1A	AXIS_ENAn		1_18	U14	P9_14
EHRPWM1B	E0_STEP		1_19	T14	P9_16
GPIO1_28	E0_DIR		1_28	U18	P9_12
GPIO1_29	ESTOP_SW		1_29	V6	P8_17
GPIO2_1	Z_DIR		2_01	V12	P8_18
TIMER4	X-MAX		2_02	R7	P8_07
TIMER7	X-MIN		2_03	T7	P8_08
TIMER6	Y-MIN		2_04	U6	P8_10
TIMER5	Y-MAX		2_05	T6	P8_09
SPI1_SCLK	SCK	V_STP	3_14	A13	P9_31
SPI1_D0	MISO	W_STEP	3_15	B13	P9_29
SPI1_D1	MOSI	W_DIR	3_16	D12	P9_30
SPI1_CS0	SPI_CS0	V_DIR	3_17	C12	P9_28
GPIO3_19	FET3 (E1Htr)		3_19	C13	P9_27
GPIO3_21	LED		3_21	A14	P9_25
AIN0	AIN0			B6	P9_39
AIN1	AIN1			C7	P9_40
AIN2	AIN2			B7	P9_37
AIN3	AIN3 (THERMO3)			A7	P9_38
AIN4	THERMO			C8	P9_33
AIN5	THERM1			B8	P9_36
AIN6	THERM2			A8	P9_35

Function Order

AM335 Pin	CRAMPS Pin	Exp Pin	GPIO	Chip Pin	BBB Pin
AIN0	AIN0			B6	P9_39
AIN1	AIN1			C7	P9_40
AIN2	AIN2			B7	P9_37
AIN3	AIN3 (THERMO3)			A7	P9_38
EHRPWM1A	AXIS_ENAn		1_18	U14	P9_14
GPIO1_28	E0_DIR		1_28	U18	P9_12
EHRPWM1B	E0_STEP		1_19	T14	P9_16
I2C1_SDA	E1_DIR		0_04	B16	P9_18
I2C1_SCL	E1_STEP		0_05	A16	P9_17
UART1_RXD	E2_DIR		0_14	D16	P9_26
UART1_TXD	E2_STEP		0_15	D15	P9_24
GPIO0_27	ESTOP		0_27	U12	P8_26
GPIO1_29	ESTOP_SW		1_29	V6	P8_17
GPIO1_13	FET1 (Bed)		1_13	R12	P8_11
GPIO1_16	FET2 (E0Htr)		1_16	R13	P9_15
GPIO3_19	FET3 (E1Htr)		3_19	C13	P9_27
UART2_TXD	FET4 (E2Htr)		0_03	B17	P9_21
CLKOUT2	FET5 (Fan1)		0_20	D14	P9_41
UART2_RXD	FET6 (Fan2)		0_02	A17	P9_22
GPIO3_21	LED		3_21	A14	P9_25
GPIO1_17	MACHINE_PWR		1_17	V14	P9_23
SPI1_D0	MISO	W_STEP	3_15	B13	P9_29
SPI1_D1	MOSI	W_DIR	3_16	D12	P9_30
SPI1_SCLK	SCK	V_STP	3_14	A13	P9_31
I2C2_SCL	SCL	Data	0_13	D17	P9_19
I2C2_SDA	SDA	Data	0_12	D18	P9_20
SPI1_CS0	SPI_CS0	V_DIR	3_17	C12	P9_28
GPIO0_7	SPI_CS1	U_STEP	0_07	C18	P9_42
GPIO1_14	SPI_SPARE	U_DIR	1_14	V13	P8_16
AIN4	THERMO			C8	P9_33
AIN5	THERM1			B8	P9_36
AIN6	THERM2			A8	P9_35
GPIO1_12	X_DIR		1_12	T12	P8_12
EHRPWM2B	X_STEP		0_23	T10	P8_13
TIMER4	X-MAX		2_02	R7	P8_07
TIMER7	X-MIN		2_03	T7	P8_08
GPIO0_26	Y_DIR		0_26	T11	P8_14
GPIO1_15	Y_STEP		1_15	U13	P8_15
TIMER5	Y-MAX		2_05	T6	P8_09
TIMER6	Y-MIN		2_04	U6	P8_10
GPIO2_1	Z_DIR		2_01	V12	P8_18
EHRPWM2A	Z_STEP		0_22	U10	P8_19
UART4_RXD	Z-MAX		0_30	T17	P9_11
UART4_TXD	Z-MIN		0_31	U17	P9_13

Board Pin Order

AM335 Pin	CRAMPS Pin	Exp Pin	GPIO	Chip Pin	BBB Pin
TIMER4	X-MAX		2_02	R7	P8_07
TIMER7	X-MIN		2_03	T7	P8_08
TIMER5	Y-MAX		2_05	T6	P8_09
TIMER6	Y-MIN		2_04	U6	P8_10
GPIO1_13	FET1 (Bed)		1_13	R12	P8_11
GPIO1_12	X_DIR		1_12	T12	P8_12
EHRPWM2B	X_STEP		0_23	T10	P8_13
GPIO0_26	Y_DIR		0_26	T11	P8_14
GPIO1_15	Y_STEP		1_15	U13	P8_15
GPIO1_14	SPI_SPARE	U_DIR	1_14	V13	P8_16
GPIO1_29	ESTOP_SW		1_29	V6	P8_17
GPIO2_1	Z_DIR		2_01	V12	P8_18
EHRPWM2A	Z_STEP		0_22	U10	P8_19
GPIO0_27	ESTOP		0_27	U12	P8_26
UART4_RXD	Z-MAX		0_30	T17	P9_11
GPIO1_28	E0_DIR		1_28	U18	P9_12
UART4_TXD	Z-MIN		0_31	U17	P9_13
EHRPWM1A	AXIS_ENAn		1_18	U14	P9_14
GPIO1_16	FET2 (E0Htr)		1_16	R13	P9_15
EHRPWM1B	E0_STEP		1_19	T14	P9_16
I2C1_SCL	E1_STEP		0_05	A16	P9_17
I2C1_SDA	E1_DIR		0_04	B16	P9_18
I2C2_SCL	SCL	Data	0_13	D17	P9_19
I2C2_SDA	SDA	Data	0_12	D18	P9_20
UART2_TXD	FET4 (E2Htr)		0_03	B17	P9_21
UART2_RXD	FET6 (Fan2)		0_02	A17	P9_22
GPIO1_17	MACHINE_PWR		1_17	V14	P9_23
UART1_TXD	E2_STEP		0_15	D15	P9_24
GPIO3_21	LED		3_21	A14	P9_25
UART1_RXD	E2_DIR		0_14	D16	P9_26
GPIO3_19	FET3 (E1Htr)		3_19	C13	P9_27
SPI1_CS0	SPI_CS0	V_DIR	3_17	C12	P9_28
SPI1_D0	MISO	W_STEP	3_15	B13	P9_29
SPI1_D1	MOSI	W_DIR	3_16	D12	P9_30
SPI1_SCLK	SCK	V_STP	3_14	A13	P9_31
AIN4	THERMO			C8	P9_33
AIN6	THERM2			A8	P9_35
AIN5	THERM1			B8	P9_36
AIN2	AIN2			B7	P9_37
AIN3	AIN3 (THERMO3)			A7	P9_38
AIN0	AIN0			B6	P9_39
AIN1	AIN1			C7	P9_40
CLKOUT2	FET5 (Fan1)		0_20	D14	P9_41
GPIO0_7	SPI_CS1	U_STEP	0_07	C18	P9_42