

## 160-pin connector

Embest Mini6245 processor card is connected to carrierboard via two 1.27mm pitch dual row 80-pin female headers. Detailed pin explanation for the expansion connectors are as following:

Function	Pin (J8)	Signal	Pin (J8)	Signal	Function	Pin (J6)	Signal	Pin (J6)	Signal
LCD	1	PE0	41	PE1	USB	1	HDP A	41	HDMA
	2	PE2	42	PE3		2	GND	42	GND
	3	PE4-	43	PE5		3	HDPB-	43	HDMB
	4	PE6	44	GND	COM1	4	PB4	44	PB5
	5	GND	45	PE7	COM2	5	PB6	45	PB7
	6	PE8	46	PE9	COM3	6	PB8	46	PB9
	7	PE10	47	PE11	TWI	7	PB10	47	PB11
	8	PE12	48	PE13	DEBUG	8	PB12	48	PB13
	9	PE14	49	GND	SPI	9	PB14	49	PB15
	10	GND	50	PE15		10	PB16	50	PD18
	11	PE16	51	PE17		11	GND	51	PD26
	12	PE18	52	PE19	COM0	12	PB17	52	PB18
	13	PE20	53	PE21		13	PB19	53	GND
	14	PE22	54	GND	AC97	14	PB20	54	PB21
	15	GND	55	PE23		15	PB22	55	PB24
	16	PE24	56	PE25		16	PB23	56	PB26
	17	PE26	57	PE27		17	PB25	57	PB31
	18	PE28	58	PE29		18	PB27	58	GND
	19	PE30	59	PE31		19	PC0	59	PD19
TOUCH	20	GND	60	PD20		20	PC7	60	PC9
	21	PD21	61	PD22		21	PC10	61	PC11
	22	PD23	62	GND		22	PC12	62	PC13
DIMMING	23	PD31	63	PB28		23	PC15	63	PC16
SD CARD	24	GND	64	WKUP		24	PD12	64	PD13
	25	PA0	65	PA1		25	PD14	65	PD15
	26	PA2	66	PA3		AC97	26	PD6	66
27	PA4	67	PA5	27			PD8	67	PD9
TWI1	28	PD10	68	PD11	JTAG	28	PD27	68	NRST
SDCARD	29	PA20	69	PA21		29	NTRST	69	TDI
	30	PB29	70	PB30		30	RTCK	70	TDO
	31	PA22	71	PA23	31	TCK	71	TMS	
	32	PA24	72	PA25	32	PD16	72	PD17	
	33	PA26	73	PA27	33	GND	73	PD4	
	34	PA28	74	PA29	34	PD3	74	PD2	
NET	35	PA30	75	PA31	SPI	35	PD28	75	PD1
	36	GND	76	GND		36	PB0	76	PB1
	37	TX2-	77	TX2+	POWER	37	PB2	77	PD24
	38	RX2-	78	RX2+		38	GND	78	PD25
39	VDD33	79	AVDDT	39		VDD5V	79	VSBAT	
	40	LED3	80	LED5	40	VDD5V	80	VSBAT	