NTX Embedded Spada 2E v3.01 Pinouts and Ports

J1 - Power 12-24VDC	
Pins	Function
1	NC (reserved for chasis ground)
2	Power +
3	Power -

J7 - RS485 - Half Duplex	
Pins	Function
1	Ground
2	Data +
3	Data -
4	Data Termination

GPIO Port

No	Function
439	Write Enable
396	Read Enable

<div align="center">

Transmit: 439 = 1; 396 = 0
Receive: 439 = 0; 396 = 1

</div>

J4 - Speaker - Mono	
Pins	Function
1	Pos
2	Neg

<div align="center">

Must set GPIO 440 to turn on amp. GPIO 440 is default on.

</div>

J26 - Console Port	
Pins	Function
1	Ground
2	NC
3	NC
4	RXD*
5	TXD*
6	NC

<div align="center">

Console port requires a serial to USB cable.
Pin 4 and 5 assume the serial to USB cable is a crossover cable. If connecting manualy, plug TX into RX and RX into TX.

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J21 - Buzzer	
Pin	Function
1	Positive
2	Negative
GPIO port 469	

J14 - I2C (3.3VDC)	
Pin	Function
1	Power
2	SCL
3	SDA
4	Ground

J16 - GPIO Cape (3.3VDC)			
Pin	Function (Linux Port)	Pins	Function (Linux Port)
1	Ground	2	GPIO33_9/PWM6 (473)
3	GPIO33_0 (488)	4	GPIO33_8 (477)
5	GPIO33_1 (504)	6	Ground
7	GPIO33_2 (501)	8	GPIO33_7/SDA5 (493)
9	3.3VDC Out	10	GPIO33_6/SCL5 (492)
11	GPIO33_3 (499)	12	GPIO33_5/PWM3 (472)
13	GPIO33_4 (496)	14	5.0VDC Out
GPIO33_7_6 configured as I2C needs external 2K-10K pull-up			

J20 RS485 (TTYSC2) / RS232 (TTYSC4)			
Pin	Function	Pins	Function
1	RS485 (2) RX+	5	RS232 RX
2	RS485 (2) RX-	6	Ground
3	RS485 (2) TX+	7	RS232 TX
4	RS485 (2) TX-	8	Ground

J12 CAN	
Pins	Function
1	CAN H
2	CAN L
3	Ground

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NTX Embedded Spada 2E v3.01 Pinouts and Ports

Name on Board	Register Address	Name on Linux
Console (J26)	E6E88000	ttySC0
RTC	0x6f	i2c3
EEPROM	0x30	i2c3
I2C CONN(J14)		i2c4
Temperature Sensor	0x18	i2c3
EEProm Protection	0x50	i2c3

Name on Board	GPIO No	Port No
SOM_LED1	GP5_19	417
SOM_LED2	GP3_14	443
SOM_LED3	GP3_12	441
SOM_LED4	GP6_04	384
CARRIER_LED1	GP5_00	398
CARRIER_LED2	GP6_13	393
CARRIER_LED3	GP6_14	394
CARRIER_LED4	GP5_11	409