U$1
P8

GND		GND
GPIO1_6		GPIO1_7
GPIO1_2		GPIO1_3
TIMER4		TIMER7
TIMER5		TIMER6
GPIO1_13		GPIO1_12
EHRPWM2B		GPIO0_26
GPIO1_15		GPIO1_14
GPIO0_27		GPIO2_1
EHRPWM2A		GPIO1_31
GPIO1_30		GPIO1_5
GPIO1_4		GPIO1_1
GPIO1_0		GPIO1_29
GPIO2_22		GPIO2_24
GPIO2_23		GPIO2_25
UART5_CTSN		UART5_RTSN
UART4_RTSN		UART3_RTSN
UART4_CTSN		UART3_CTSN
UART5_TXD		UART5_RXD
GPIO2_12		GPIO2_13
GPIO2_10		GPIO2_11
GPIO2_8		GPIO2_9
GPIO2_6		GPIO2_7

TIMER4

PWDN
PRU1_8
PRU1_9

PRU1_10
PRU1_11

PRU1_6
PRU1_4
PRU1_2
PRU1_0

PRU1_7
PRU1_5
PRU1_3
PRU1_1

P9

GND		GND
VDD_3V3EXP		VDD_3V3EXP
VDD_5V		VDD_5V
SYS_5V		SYS_5V
PWR_BUT		SYS_RESETN
UART4_RXD		GPIO1_28
UART4_TXD		EHRPWM1A
GPIO1_16		EHRPWM1B
I2C1_SCL		I2C1_SDA
I2C2_SCL		I2C2_SDA
UART2_TXD		UART2_RXD
GPIO1_17		UART1_TXD
GPIO3_21		UART1_RXD
GPIO3_19		SPI1_CS0
SPI1_DO		SPI1_DI
SPI1_SCLK		VDD_ADC
AIN4		GNDA_ADC
AIN6		AIN5
AIN2		AIN3
AIN0		AIN1
CLKOUT2		GPIO0_7
GND		GND
GND		GND

GND

±5V

I2C2_SCL
UART2_TXD

GND

+5V

I2C2_SDA
UART2_RXD
DCAN1_RX
DCAN1_TX

BEAGLEBONE_OUTLINE

I2C2
- EEPROM Chip (Cape Standard)
- Camera

UART2_TXD
- Dynamixel

VDD_3V3EXP
- Max current of 250mA
  - MCP2562 - 500uA
  - OV5642 - ~270mA

Tri-State Buffer
- P9.23

+12V

12VIN
WIREPADSMD5-2,5

C6
10uF

GNDIN
WIREPADSMD5-2,5

GND

+5V

2	NC	VOUT	3
1	VEN	VIN	4
		GND	5

+3V3

+5V

C5
1uF

C1
4.7uF

LP38693MP-3.3/NOPB
U3

GND

U2   LM1085ISX-ADJ

+10V

| 3 | IN | OUT | 2 |
| 4 | TAB | ADJ | 1 |

+12V

C2
10uF

R1
130

R2
910

C4
100uF

GND

5V
V78-2000

+12V

| 1 | VIN | GND | VOUT | 3 |

+5V

C7
10uF

2

C3
22uF

MCP2562-E/P
U1

+5V

DCAN1_RX   4   RXD
            3   VDD
            2   VSS
DCAN1_TX   1   TXD

GND

VIO   5
CANL   6
CANH   7
STBY   8

+3V3

GND

GND

+5V

J2
1
2
3
4

+3V3

+3V3

+3V3

R3
10k

R4
10k

U$3
ARDUCAM OV5642

Pin	Signal	Signal	Pin	
1	VCC	GND	2	GND
3	SCL	SDATA	4	I2C2_SDA
5	VSYNC	HREF	6	PRU1_11
7	PCLK	XCLK	8	TIMER4
9	DOUT9	DOUT8	10	PRU1_8
11	DOUT7	DOUT6	12	PRU1_6
13	DOUT5	DOUT4	14	PRU1_4
15	DOUT3	DOUT2	16	PRU1_2
17	PWDN	RSV	18	
19	DOUT1	DOUT0	20	PRU1_0

I2C2_SCL
PRU1_12
PRU1_10
PRU1_9
PRU1_7
PRU1_5
PRU1_3
PWDN
PRU1_1