Table 2.1: Some of the pin functions on the PIC32

Pin Label	Function
ANx (x = 0 to 15)	Analog-to-digital (ADC) inputs
AVDD, AVSS	Positive supply and ground reference for ADC
CxIN-, CxIN+, CxOUT (x = 1, 2)	Comparator negative and positive input and output
CxRX, CxTx (x = 1, 2)	CAN receive and transmit pins
CLKI, CLKO	Clock input and output (for particular clock modes)
CNx (x = 0 to 18)	Change notification; voltage changes on these pins can generate interrupts
CVREF-, CVREF+, CVREFOUT	Comparator reference voltage low and high inputs, output
D+, D-	USB communication lines
ENVREG	Enable for on-chip voltage regulator that provides 1.8 V to internal core (on the NU32 board it is set to VDD to enable the regulator)
ICx (x = 1 to 5)	Input capture pins for measuring frequencies and pulse widths
INTx (x = 0 to 4)	Voltage changes on these pins can generate interrupts
$\overline{\text{MCLR}}$	Master clear reset pin, resets PIC when low
OCx (x = 1 to 5)	Output compare pins, usually used to generate pulse trains (pulse-width modulation) or individual pulses
OCFA, OCFB	Fault protection for output compare pins; if a fault occurs, they can be used to make OC outputs be high impedance (neither high nor low)
OSC1, OSC2	Crystal or resonator connections for different clock modes
PMAx (x = 0 to 15)	Parallel master port address
PMDx (x = 0 to 7)	Parallel master port data
PMENB, PMRD, PMWR	Enable and read/write strobes for parallel master port
Rxy (x = B to G, y = 0 to 15)	Digital I/O pins
RTCC	Real-time clock alarm output
SCLx, SDAx (x = 1, 3, 4, 5)	I^{2}C serial clock and data input/output for I^{2}C synchronous serial communication modules
SCKx, SDIx, SDOx (x = 2 to 4)	Serial clock, serial data in, out for SPI synchronous serial communication modules
$\overline{\text{SSx}}$ (x = 2 to 4)	Slave select (active low) for SPI communication
T1CK	Input pin for counter/timer 1 when counting external pulses
$\overline{\text{UxCTS}}$, $\overline{\text{UxRTS}}$, UxRX, UxTX (x = 1 to 6)	UART clear to send, request to send, receive input, and transmit output for UART modules
VDD	Positive voltage supply for peripheral digital logic and I/O pins (3.3 V on NU32)
VDDCAP	Capacitor filter for internal 1.8 V regulator when ENVREG enabled
VDDCORE	External 1.8 V supply when ENVREG disabled
VREF-, VREF+	Can be used as negative and positive limit for ADC
VSS	Ground for logic and I/O
VBUS	Monitors USB bus power
VUSB	Power for USB transceiver
USBID	USB on-the-go (OTG) detect

See Section 1 of the Data Sheet for more information.