

Arduino-to-NanoCore12DX TTL Shield Adapter

[JB4] TX/RX Communications Router:
Place two shunts in the UN position
UN = USB-to-NanoCore12DX
(other functions to be implemented
on future design revisions)

[J1][J2]: USB2MCU module goes here,
to provide USB interface to host PC;
or supply your own TTL-level signals
to/from Host

[J7][J8]: [Xbee Option]
Plug ADXB here for Xbee Interface
(3V/5V compatible). Not functional
on Rev. 1 boards.

[J5]: SPI peripheral connector.
SPI signals, OE (PT3), +5V,
and Ground are all brought out to
this convenient connector for easy
interfacing to SPI peripherals

[JB1]: 5V Source Selector
1-2 (lower): 5V from USB
2-3 (upper): 5V from U1 via VIN

[D1]: Power indicator LED

[U3]: 3.3V regulator (800 mA max.)

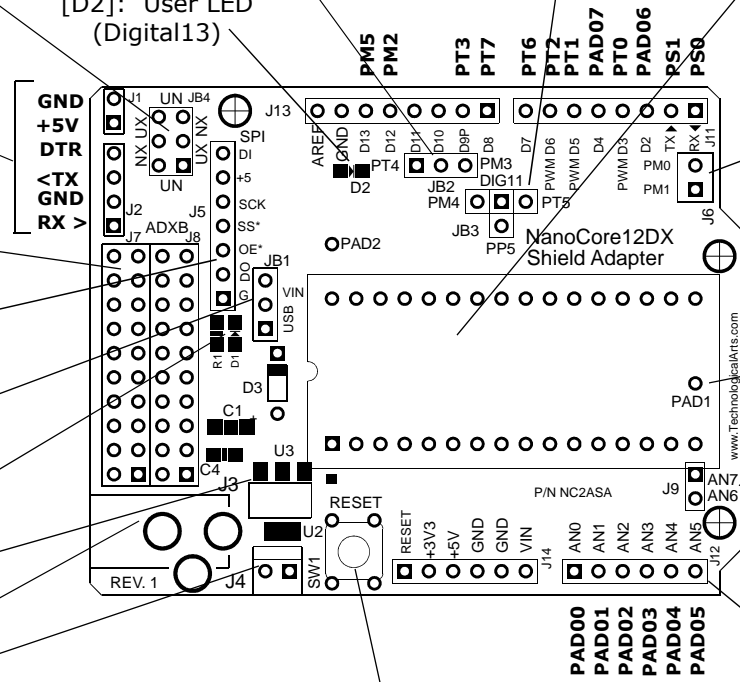
Power Configurations:
Instead of deriving 5V to power the board from the USB Host connection, it can be derived from on-board regulator U1. Two different power connections are provided: J3 and J4. The 2-pin J4 Molex connector is the default, while J3 is an optional barrel jack connector (2.1mm center-positive) compatible with most common AC-to-DC adapters. If J3 is present, and a voltage supply is plugged in, it will automatically override J4. The applied voltage (VIN) can be Anywhere in the range of 7 to 15V DC. To choose VIN as The source of system 5V (via regulator U1), set jumper block JB1 to the 2-3 (upper) position.

[JB2]: Digital10 Source
1-2 (left): PT4
2-3 (right): PM3

[D2]: User LED
(Digital13)

[JB3]: Digital11 Source
1-2 (left): PM4
1-3 (down): PP5 (PAD1)
1-4 (right): PT5

[U3]:
Socket for NanoCore12DX TTL version
(do not use RS232 version!)



[J6] PM0 - PM1:
Two bonus pins provide access
To CAN subsystem (RXCAN and
TXCAN, respectively); may be
used as general-purpose digital
inputs or outputs instead.

[PAD1]: Center pin of Load/Run
switch can be brought down
to this pad to provide a sixth
PWM channel (PP5); note,
however, that it will interfere with
Serial Monitor operation.
Select via jumper block JB3

[J9] AN6 - AN7:
Two bonus Analog Inputs;
may be used as digital
inputs or outputs instead

[J12] AN0 - AN1:
Six Analog Inputs;
Any of these may be
used as digital inputs
or outputs instead

[SW1]:
Reset button

Order Codes:
NCT2ASA (without USB2MCU & connectors)
NCT2ASA-UR (with USB2MCU installed)

