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LPC1343 (Cortex-M3) vs. LPC11U1x (Cortex-M0)

Rev. 1.1 — 1 August 2011   **Technical note**

Revision history

Rev	Date	Description
1.1	20110801	• Section 1: Corrected reference to LPC1343 LQFP48 pin 36 (PIO3_0).
1	20110601	• Initial version.

Contact information

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1. LPC1343 (Cortex-M3) vs. LPC11U1x (Cortex-M0)

The LPC1343 is functionally pin-to-pin compatible with the LPC11U1x. Please note: The GPIO functions on the LPC134X may not map on the LPC11U1x so software will have to be adapted to support port pin address differences. For example, Pin 36 on the LPC1343 LQFP48 is PIO3_0, on the LPC11U1x part Pin 36 is PIO1_13 (plus additional functions DTR, CT16B0_MAT0, and TXD). Thus GPIO function is maintained but is on a different GPIO port.

The LPC11U1x also has extra functionality added to some pins while the original LPC1343 functions remain valid. Boards designed for the LQFP48 package will work well with the Cortex-M0 version.

Other key differences:

- LPC11U1x is 50 MHz part, LPC1343 up to 72 MHz
- LPC11U1x uses new USB IP v LPC1343 - software change required
- SSP(1) added to LPC11U1x (SSP(0) only on LPC1343)
- The internal 'Pull ups' are now to Vdd_i/o rail (not Vt drop below Vdd_i/o rail)
- Power consumption improvements, power profiles supported
- Windowed WDT
- NMI, USART, and Boundary scan added to LPC11U1x
- Updated GPIO Block
- Updated muxing, e.g., UART Modem signals available on more than one pin
- Adjustable Interrupt latency register added
- LPC11U1x Internal RC oscillator trimmed to ±<tbd> % accuracy over the entire voltage and temperature range vs. 1 % for the LPC1343.
- LPC11U1x does not have USB MSC and HID on-chip drivers, while the LPC134x does.
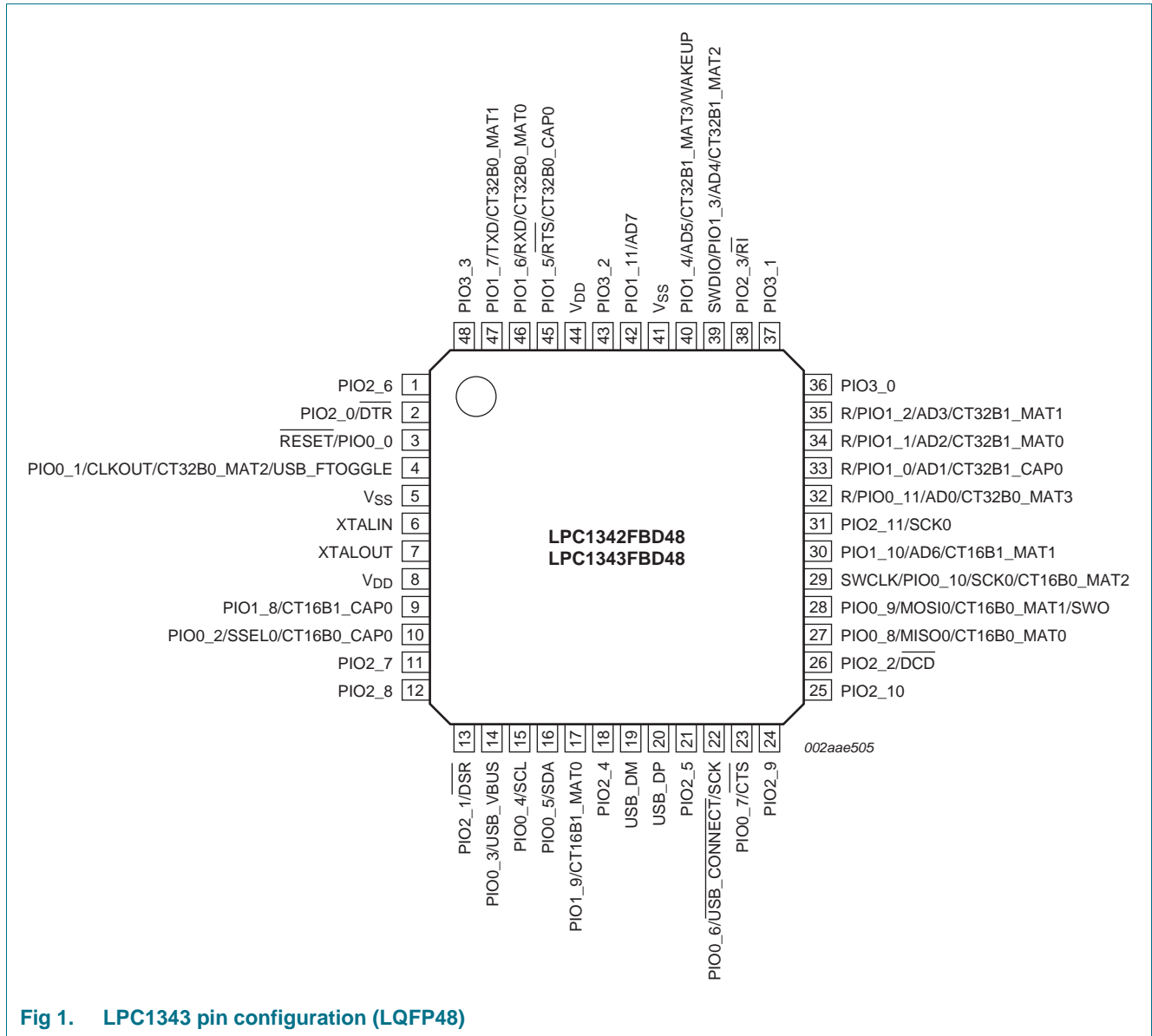
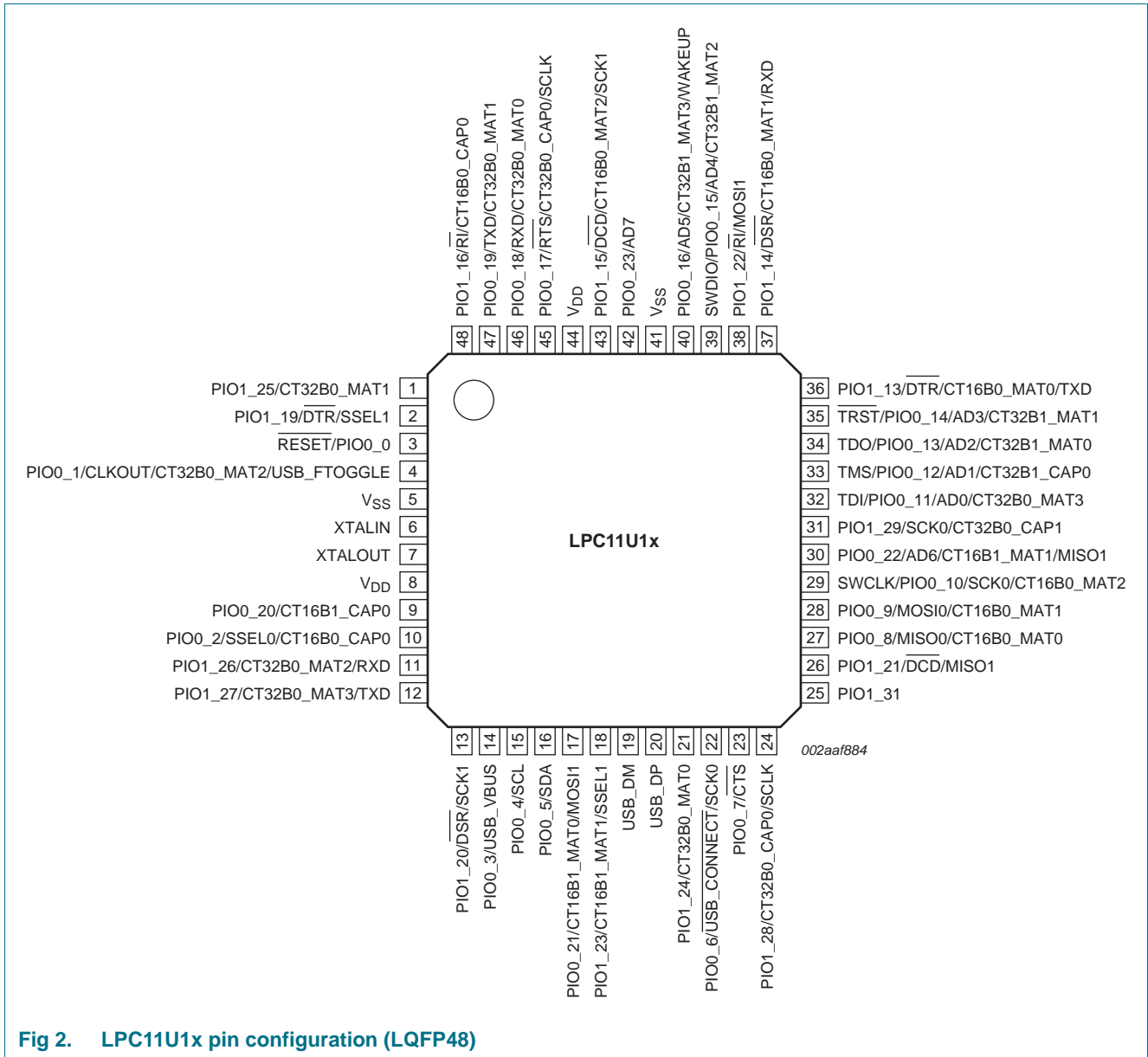**Fig 1.   LPC1343 pin configuration (LQFP48)**
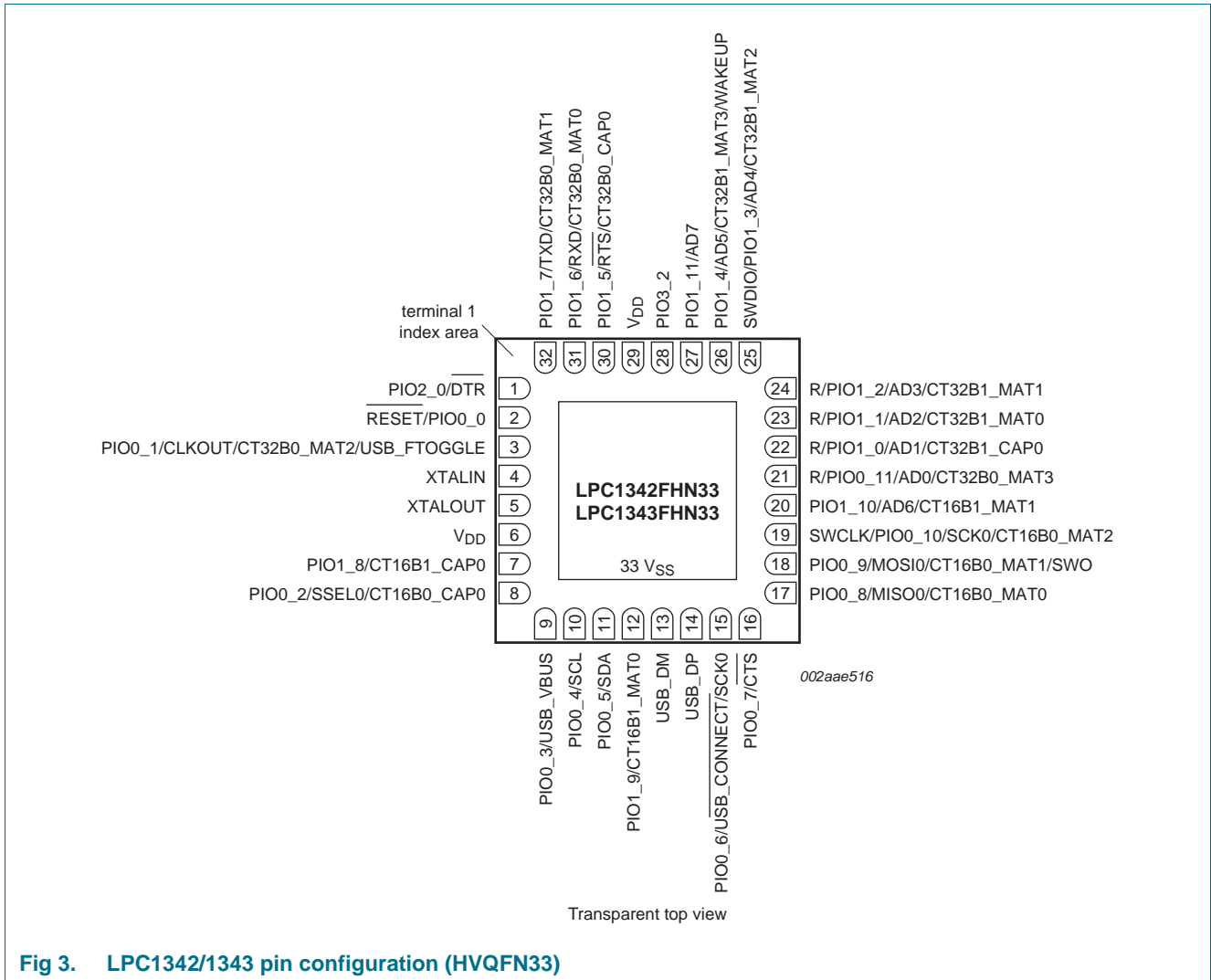
Fig 2. **LPC11U1x pin configuration (LQFP48)**

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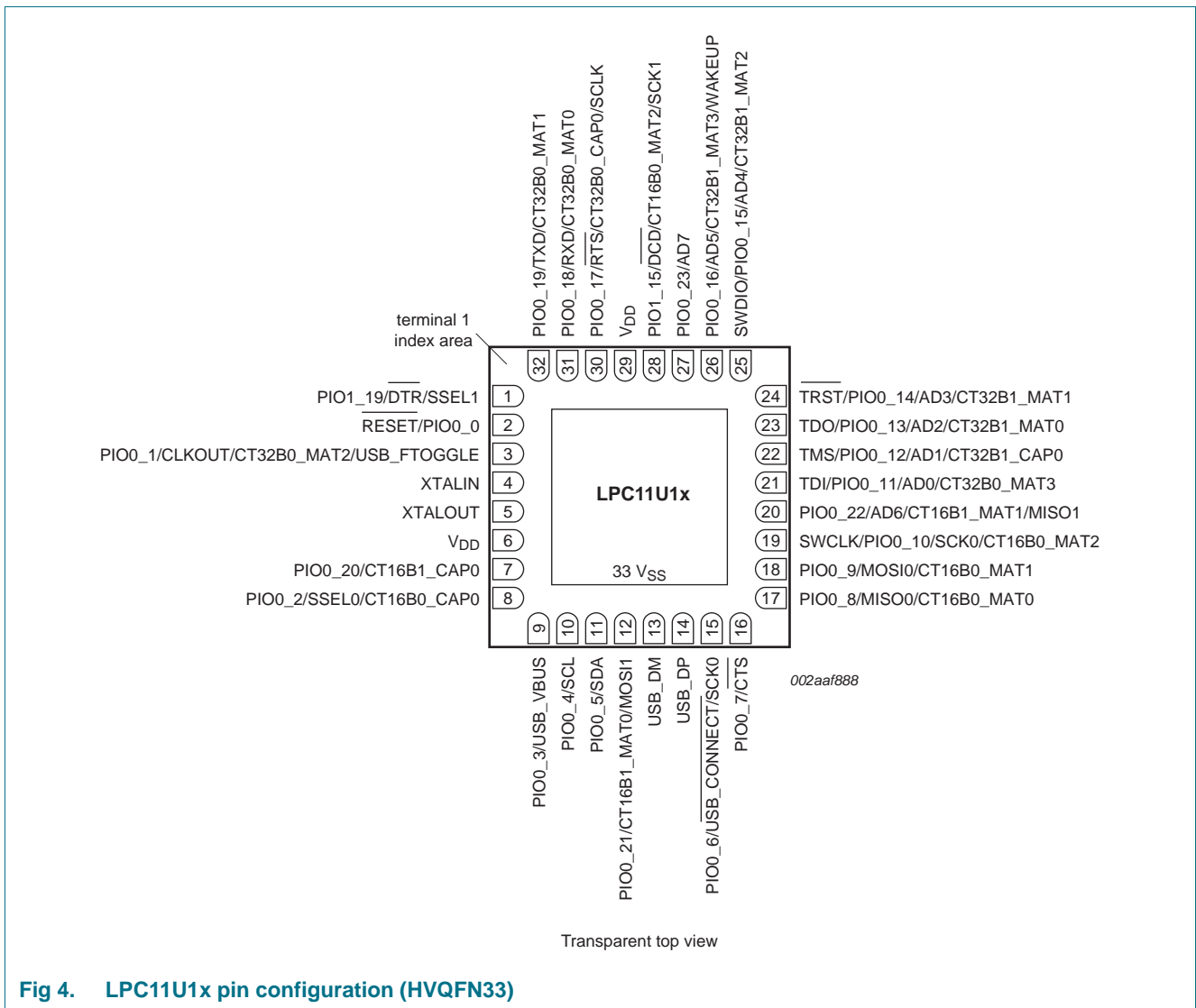**Fig 3.**   **LPC1342/1343 pin configuration (HVQFN33)**

Fig 4.   LPC11U1x pin configuration (HVQFN33)

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