|    | Arduino Due |         |         | EEZ Arduino shield r3B4 |             |  |
|----|-------------|---------|---------|-------------------------|-------------|--|
|    | Pin         | Pin no. | IDE pin |                         |             |  |
| #  | name        | _       | name    | Pin name                | Type        | Description  |
| 1  | PE0         | 2       | 0       | _                       | _           | -  |
| 2  | PE1         | 3       | 1       | -                       | -           |  |
| 3  | PE4         | 6       | 2       | TOUCH_IRQ               | Digital in  | Touch screen interrupt request                             |
| 4  | PE5         | 7       | 3       | TOUCH_DOUT              | Digital in  | Touch screen data out                                      |
| 5  | PG5         | 1       | 4       | WIFI_CE                 | Digital out | WIFI module Rx/Tx select (optional)                        |
| 6  | PE3         | 5       | 5       | WATCHDOG                | PWM 8-bit   | TPS3705-33 reset supervisor watch-<br>dog input (optional) |
| 7  | PH3         | 15      | 6       | FAN_PWM                 | PWM 8-bit   | FAN speed control  |
| 8  | PH4         | 16      | 7       | LCD_BRIGHTNESS          | PWM 8-bit   | LCD background control (0=max. brightness)                 |
| 9  | PH5         | 17      | 8       | RTC_SELECT              | Digital out | PCA21125 RTC chip select                                   |
| 10 | PH6         | 18      | 9       | BP_SELECT               | Digital out | TLC5925 16-output driver select                            |
| 11 | PB4         | 23      | 10      | BP_OE                   | Digital out | <u>TLC5925</u> 16-output driver output en-<br>able         |
| 12 | PB5         | 24      | 11      | ETH_SELECT              | Digital out | <u>W5500</u> Ethernet chip select                          |
| 13 | PB6         | 25      | 12      | BUZZER                  | PWM 8-bit   | Buzzer   |
| 14 | PB7         | 26      | 13      | FAN_SENSE               | Digital in  | Fan tachometric signal for 3-wire fan                      |
| 15 | PJ1         | 64      | 14      | ISOLATOR1_EN            | Digital out | Ch#1 Data out (MISO) enable                                |
| 16 | PJ0         | 63      | 15      | ADC1_SELECT             | Digital out | Ch#1 ADS1120 ADC chip select                               |
| 17 | PH1         | 13      | 16      | DAC1_SELECT             | Digital out | Ch#1 DAC8552 DAC chip select                               |
| 18 | PH0         | 12      | 17      | IO_EXPANDER1            | Digital out | Ch#1 MCP23S08 8-bit expander chip select                   |
| 19 | PD3         | 46      | 18      | ETH_IRQ                 | Digital in  | W5500 Ethernet interrupt request                           |
| 20 | PD2         | 45      | 19      | RTC_IRQ                 | Digital in  | PCA21125 RTC interrupt request                             |
| 21 | PD1         | 44      | 20      | CONVEND2                | Digital in  | Ch#2 DRDY/Interrupt  |
| 22 | PD0         | 43      | 21      | CONVEND1                | Digital in  | Ch#1 DRDY/Interrupt  |
| 23 | PA0         | 78      | 22      | LCD_DB8                 | Digital out | LCD Data I/O 8   |
| 24 | PA1         | 77      | 23      | LCD_DB9                 | Digital out | LCD Data I/O 9   |
| 25 | PA2         | 76      | 24      | LCD_DB10                | Digital out | LCD Data I/O 10  |
| 26 | PA3         | 75      | 25      | LCD_DB11                | Digital out | LCD Data I/O 11  |
| 27 | PA4         | 74      | 26      | LCD_DB12                | Digital out | LCD Data I/O 12  |
| 28 | PA5         | 73      | 27      | LCD_DB13                | Digital out | LCD Data I/O 13  |
| 29 | PA6         | 72      | 28      | LCD_DB14                | Digital out | LCD Data I/O 14  |
| 30 | PA7         | 71      | 29      | LCD_DB15                | Digital out | LCD Data I/O 15  |
| 31 | PC7         | 60      | 30      | LCD_DB7                 | Digital out | LCD Data I/O 7   |
| 32 | PC6         | 59      | 31      | LCD_DB6                 | Digital out | LCD Data I/O 6   |
| 33 | PC5         | 58      | 32      | LCD_DB5                 | Digital out | LCD Data I/O 5   |
| 34 | PC4         | 57      | 33      | LCD_DB4                 | Digital out | LCD Data I/O 4   |
| 35 | PC3         | 56      | 34      | LCD_DB3                 | Digital out | LCD Data I/O 3   |
| 36 | PC2         | 55      | 35      | LCD_DB2                 | Digital out | LCD Data I/O 2   |
| 37 | PC1         | 54      | 36      | LCD_DB1                 | Digital out | LCD Data I/O 1   |

| 38 | PC0 | 53 | 37            | LCD_DB0       | Digital out | LCD Data I/O 0                                 |
|----|-----|----|---------------|---------------|-------------|--|
| 39 | PD7 | 50 | 38            | LCD_RESET     | Digital out | LCD register select                            |
| 40 | PG2 | 70 | 39            | LCD_CS        | Digital out | LCD write                                      |
| 41 | PG1 | 52 | 40            | LCD_WR        | Digital out | LCD select                                     |
| 42 | PG0 | 51 | 41            | LCD_RS        | Digital out | LCD reset                                      |
| 43 | PL7 | 42 | 42            | TOUCH_DIN     | Digital in  | Touch screen data in (not used with<br>HW SPI) |
| 44 | PL6 | 41 | 43            | TOUCH_CS      | Digital out | Touch screen select (not used with HW SPI)     |
| 45 | PL5 | 40 | 44            | TOUCH_SCLK    | Digital out | Touch screen clock (not used with HW SPI)      |
| 46 | PL4 | 39 | 45            | ISOLATOR2_EN  | Digital out | Ch#2 Data out (MISO) enable                    |
| 47 | PL3 | 38 | 46            | IO_EXPANDER2  | Digital out | Ch#2 MCP23S08 8-bit expander chip select       |
| 48 | PL2 | 37 | 47            | DAC2_SELECT   | Digital out | Ch#2 DAC8552 DAC chip select                   |
| 49 | PL1 | 36 | 48            | ADC2_SELECT   | Digital out | Ch#2 ADS1120 ADC chip select                   |
| 50 | PL0 | 35 | 49            | EEPROM_SELECT | Digital out | External <u>EEPROM</u> chip select             |
| 51 | PB3 | 22 | 50            | MISO          | Digital in  | SPI MISO signal                                |
| 52 | PB2 | 21 | 51            | MOSI          | Digital out | SPI MOSI signal                                |
| 53 | PB1 | 20 | 52            | SCLK          | Digital out | SPI SCLK signal                                |
| 54 | PB0 | 19 | 53            | LCDSD_CS      | Digital out | LCD SD-card select                             |
| 55 | PF0 | 97 | 54 (A0)       | TEMP_ANALOG   | Analog in   | Main transformer NTC temperature sensor        |
| 56 | PF1 | 96 | 55 (A1)       | PWR_DIRECT    | Digital out | AC power direct triac control                  |
| 57 | PF2 | 95 | 56 (A2)       | PWR_SSTART    | Digital out | AC power soft-start triac control              |
| 58 | PF3 | 94 | 57 (A3)       | -             | _           | -  |
| 59 | PF4 | 93 | 58 (A4)       | BATT_NTC      | Digital in  | Opto-isolated V/F converter for Battery NTC    |
| 60 | PF5 | 92 | 59 (A5)       | NTC1          | Analog in   | Ch#1 NTC temperature sensor                    |
| 61 | PF6 | 91 | 60 (A6)       | NTC2          | Analog in   | Ch#2 NTC temperature sensor                    |
| 62 | PF7 | 90 | 61 (A7)       | EXT_TRIG      | Digital in  | External digital trigger input (3.3 or 5 V)    |
| 63 | PK0 | 89 | 62 (A8)       | ENC_A         | Digital in  | Rotary encoder channel A (optional)            |
| 64 | PK1 | 88 | 63 (A9)       | ENC_B         | Digital in  | Rotary encoder channel B (optional)            |
| 65 | PK2 | 87 | 64 (A10)      | _             | _           | _  |
| 66 | PK3 | 86 | 65 (A11)      | DOUT          | Digital out | Opto-isolated digital output                   |
| 67 | PK4 | 85 | 66 (DAC0)     | _             | _           | _  |
| 68 | PK5 | 84 | 67 (DAC1)     | _             | -           | -  |
| 69 | PK6 | 83 | 68<br>(CANRX) | _             | _           | _  |
| 70 | PK7 | 82 | 69<br>(CANTX) | -             | -           | -  |
| 71 | PD0 | 43 | _             | <u> </u>      | _           | <del>-</del>                                   |
|    |     |    |               |               |             |  |