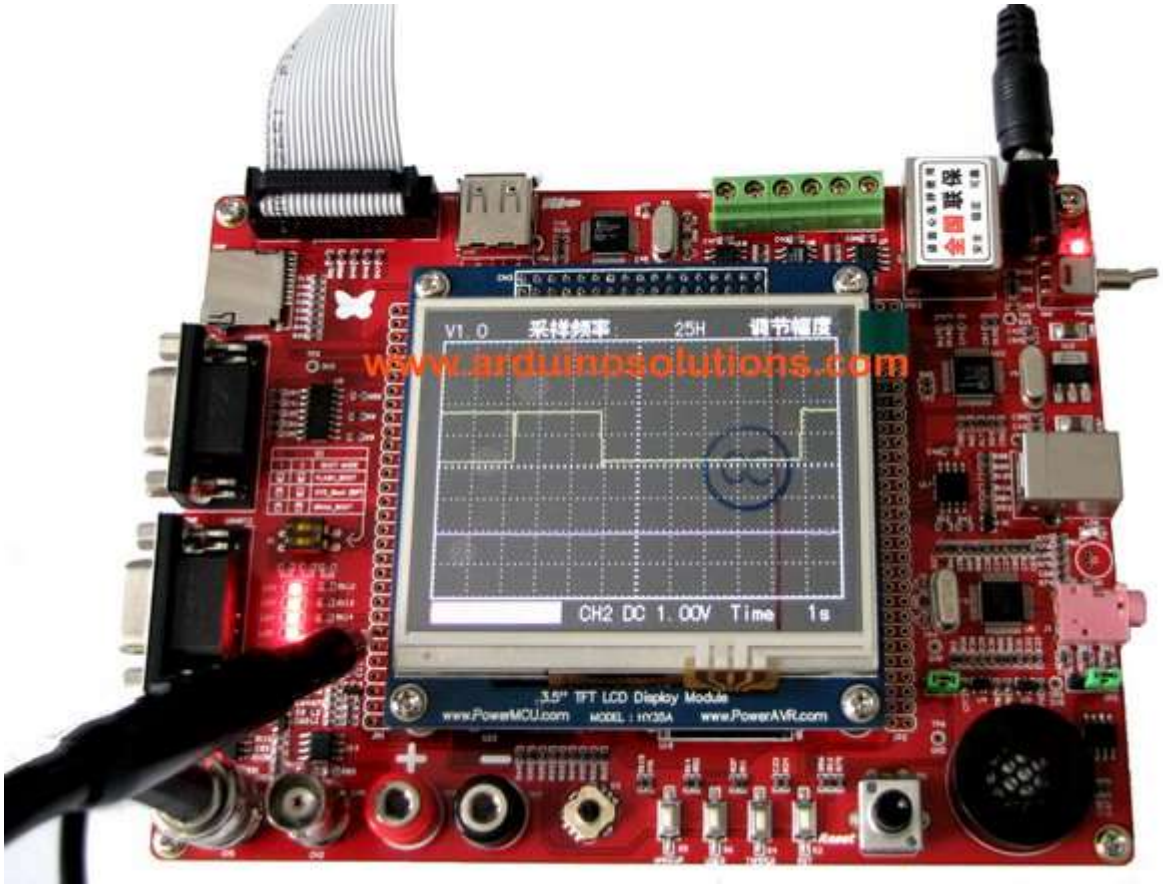
HY-RedBullV3 STM32F103ZET6 + LCD 3,5"



Features

- MCU: STM32F103ZET6 from STMicroelectronics, incorporates the high-performance ARM® Cortex™-M3 32-bit RISC core operating at a 72 MHz frequency in LQFP144 package. The STM32F103ZET6 offers high-speed embedded memories(512KB FLASH, 64KB RAM), 12-bit ADC, PWM, I2C, SPI, I2S, SDIO, USART, USB, and CAN.
- 3.5" TFT LCD touch screen, 320*240 resolution, 262k color, 8-bit or 16-bit interfaces, FSMC bus, stand-alone touch controller: ADS7843
- Memories:
- 1 MBit SRAM * 2
- 128 MBytes NAND FLASH
- 16 MBytes NOR Flash
- 16 MBit Flash with SPI interface
- 2 KBit EEPROM with I2C interface
- MicroSD card slot, SD bus (the SD card is not included), supports FATFS
- Onboard high performance MP3/WMA/MIDI audio decoder and ADPCM encoder: VS1003B. It is a single-chip MP3/WMA/MIDI audio decoder and ADPCM encoder. It contains a highperformance, proprietary low-power DSP processor core VS DSP4, working data memory, 5 KiB instruction RAM and 0.5 KiB data RAM for user applications, serial control and input data

interfaces, 4 general purpose I/O pins, an UART, as well as a high-quality variable-sample-rate mono ADC and stereo DAC, followed by an earphone amplifier and a common buffer.

- Audio output: 3.5mm earphone jack & onboard speaker
- USB host port, features a embedded USB Host/Slave controller: SL811HS
- USB device port, supported by STM32F103ZET6
- Ethernet module, features a ethernet controller: DM9000A
- Integrated 10/100M transceiver with HP Auto-MDIX
- IEEE802.3x flow control for full-duplex mode
- Integrated 16 KBytes SRAM
- Supports IP/TCP/UDP checksum generation and checking
- Supports automatically load vendor ID and product ID from EEPROM
- Other communication features: CAN, RS485, RS232
- Boot mode selection switches
- Integrated Voltmeter and Dual Channel Oscilloscope circuit
- Human-Machine Interfaces: four user LEDs, one joystick(5 directions), four buttons (Wakeup, User, Tamper, Reset)
- Debugging interface: 20-pin JTAG port, compatible with ST-Link, JLink, NLink2, etc

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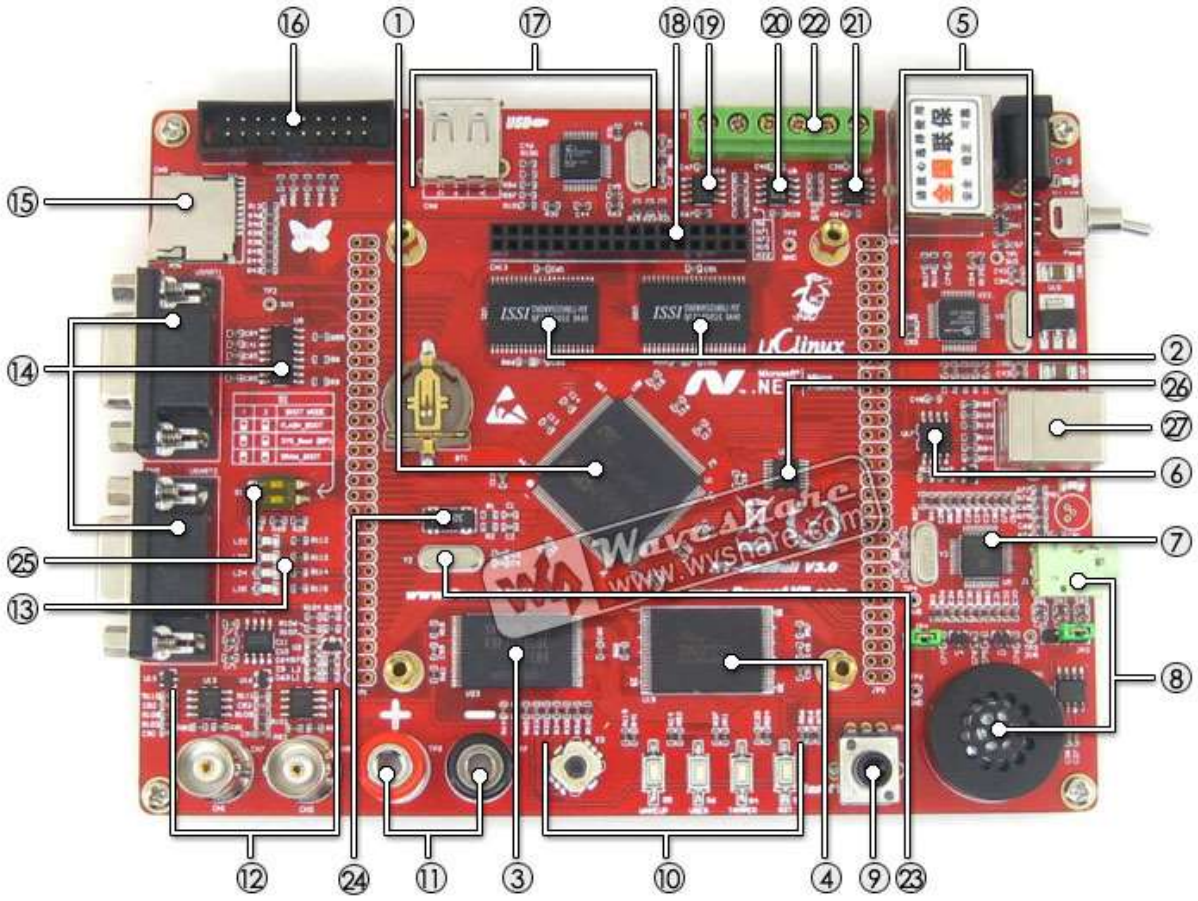
What's On Board



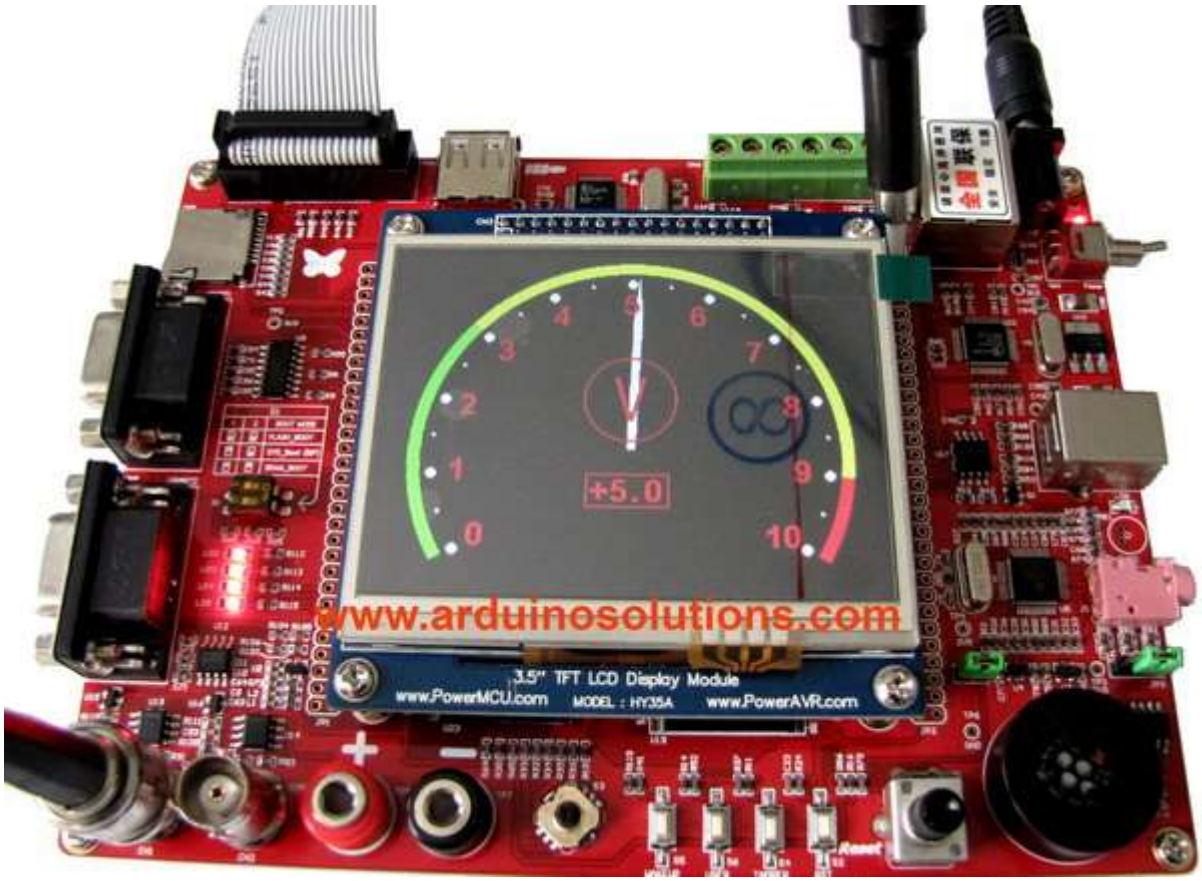
1. MCU: STM32F103ZET6, LQFP144 package
2. Two SRAM, 1 MBit (ISSI)
3. NADN Flash, 128 MBytes (SAMSUNG)
4. NOR Flash, 16 MBytes (SPANSION)
5. Ethernet module
- Ethernet controller: DM9000A
- RJ45 connector
6. 16 MBit Flash with SPI interface: SST25VF016B
7. MP3/WMA/MIDI audio decoder and ADPCM encoder: VS1003B
8. 3.5mm earphone jack & onboard speaker
9. Adjustable potentiometer, for analog input
10. one joystick (5 directions) & four buttons (Wakeup, User, Tamper, Reset)
11. Voltmeter probe connector
12. BNC female connectors, for dual channel oscilloscope circuit CH1, CH2
13. Four user LEDs
14. RS232 module
- RS232 transceiver: SP3232
- Two DB9 connector
15. MicroSD card slot
16. 20-pin JTAG debugger header, compatible with ST-Link, JLink, NLink2, etc
17. USB module
- USB host port
- Embedded USB Host/Slave controller: SL811HS
18. TFT LCD module connector
19. 2 KBit EEPROM with I2C interface: 24LC02
20. RS485 transceiver: SP3485
21. CAN2.0A/B transceiver: SN65VHD230
22. Screw-terminated connectors for CAN & RS485
23. 8M external crystal
24. 32.768KHz crystal, supports RTC
25. Switches for boot mode selection
26. Address decoder: 74HC139
27. USB2.0 device port

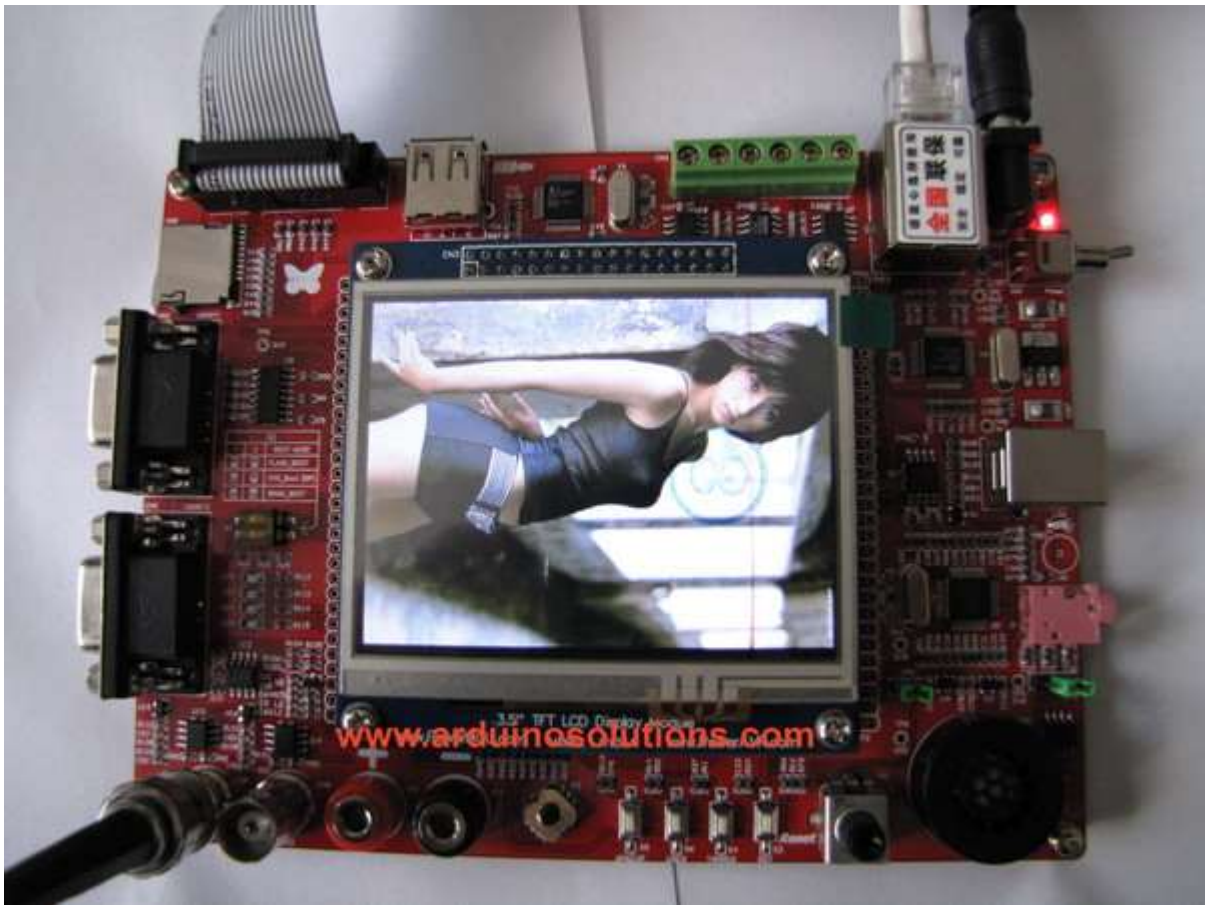
Development Resources

- Related softwares
- Examples
- Schematic
- Library for STM32
- Development documents
- Datasheets of onboard chips

Package Contains

1. HY-RedBull V3 Development Board (including 3.5" LCD Module)
2. USB Cable
3. Serial Cable
4. RJ45 Ethernet Cable
5. Zestaw nie zawiera sondy oscyloskopowej
6. 5V Power Adapter
7. User Guide CD (including development resources)

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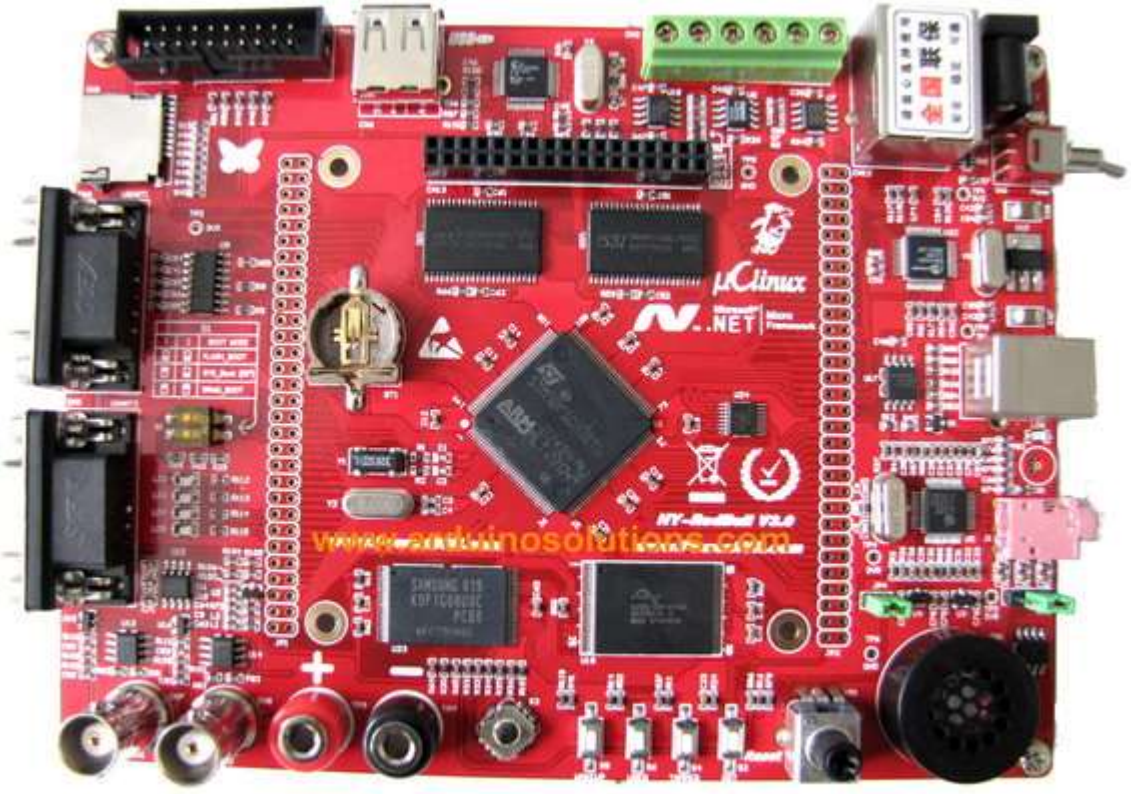
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Sine wave
3.5" TFT LCD Display Module
www.PowerAVR.com
MODEL : HY35A