

Pat's Robotics & Mechatronics

Developments by Pat McMahon as of 19/9/2013—Version 14

using the Picaxe 8M2 Microcontroller* and Uniboard**

* Picaxe is the registered trade mark of Revolution Education Ltd UK

** Uniboard is the PCB developed by APMP

- 901-BasketBall Counter
- 902-Pneumatic Can Crusher
- 903-Fans
- 904-Bubbles
- 905-Jumbo7 Segment Jig
- 906-OLED Message Jig
- 907-Infrared No Clicks/Flashes
- 908-Mini Washing Machine
- 909-Clear Tube Fan Polystyrene Ball Riser
- 910- Pneumatics- Movement to Music
- 911- Pneumatics- Forward, Reverse
- 912- Teddy Bear — Squeeze hand to operate
- 913- Rudolf the Red Nose Reindeer
- 914- Birthday Cake
- 915- Infrared Pneumatics
- 916- Servo Railway Crossing
- 917- Jewellery Box
- 918- Infrared Air Ball Tube
- 919- Sheet Music- Baa Baa Black Sheep
- 920- Sheet Music- Mary had a Little Lamb

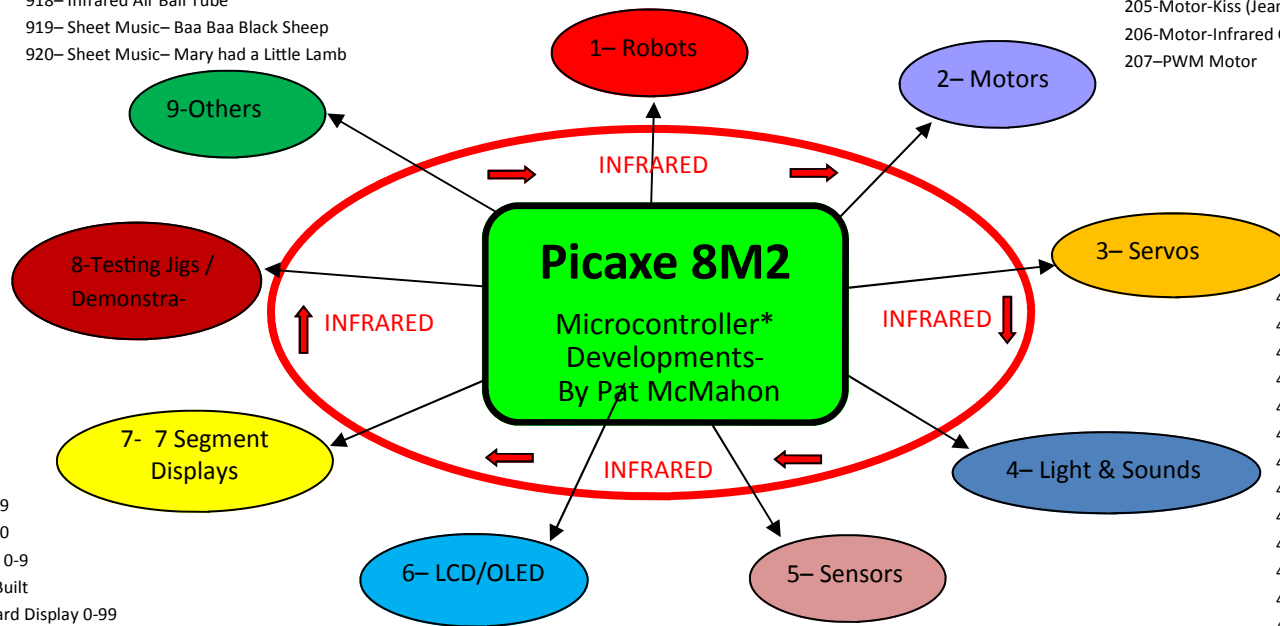
- 101-Crazy Robot
- 102-Infrared Robot
- 103-Infrared Tank
- 104- Line tracking Mouse
- 105-Light Seeking Robot
- 106-Infrared Crane
- 107-Robot Arm
- 108-Bumper Mouse
- 109-6 Legged Moon Buggy
- 110-6 Legged Insect
- 111-Manual Switch & LDR Robot
- 112-Large Hexapod Robot
- 113-Hover Soccer Ball
- 114-Dancing Musical Ball
- 115- Manual Tank
- 116- Infrared Mouse
- 117- Ultrasonic Avoidance Tank

- 801-Picaxe Extension Board Test Jig
- 802-Infrared Module General Test Jig
- 803-Robot Buggy Infrared Test Jig
- 804-Small 7 Segment Auto 0-9 Test Jig
- 805-Jumbo7 Segment Auto 0-9 Test Jig
- 806-Infrared Module Robot Buggy Test Jig
- 807-Infrared Module -7 Seg small Test Jig
- 808-LED Polarity Simulator Demo
- 809-Infrared Module Test Jig
- 810-Rev Ed- AXE 092 White Board Demo
- 811-SES 8M Student Experimenter Board
- 812-Infrared Components Parts Demo
- 813-OLED- Universal Remote -if Infra=N jig
- 814-Quick Uniboard Input-Output Test
- 815-Binary Counter-Switched Activated
- 816-Binary- Decimal Counter

- 201-Motor-1 way -1 Switched Activated
- 202-Motor-2 way -2 Switched Activated
- 203-Motor-H Bridge only, no Microcontroller
- 204-Motor-LDR Activated 1way
- 205-Motor-Kiss (Jean Simmons) & CAM operated tongue
- 206-Motor-Infrared Clockwise/Anticlockwise
- 207-PWM Motor

- 301-Servo -Auto Count Demo
- 302-Servo-Infrared No Pointer
- 303-Servo-Analogue/7 Seg Digital/ 4Fan
- 304-Servo-Temperature Pointer
- 305-Servo-small Music Conductor
- 306-Servo-automatic 2 sec
- 307-Servo-large arm Music Conductor
- 308-

- 401-Extension Board- Super Mario
- 402-3 x Disco Light Boxes
- 403-Light Chasing LED's
- 404-Jade's push button & Guess 10 Tunes
- 405-External Output Jack
- 406-Disco Light -7 x 4 rectangle
- 407-Disco Light - star
- 408-Uniboard Construction Test
- 409-14M-SES(KS1084)-9 LED outputs
- 410-Flashing Photo Frame
- 411-Infrared Colour Fan
- 412-Infrared 4 Colour LED's
- 413-Pyramid LED Lights
- 414-Infrared 4 Tunes
- 415-Infrared 3 LED -On-Off
- 416-Wall-5 LED Light Displays
- 417-Two Tone Door Chime
- 418-Playing 4 Inbuilt Tunes
- 419-Pedestrian Traffic Lights
- 420-256 Sounds
- 421-Gun Fire
- 422-American Police Siren
- 423-British Police Siren
- 424-PWM- LED Fade out
- 425-Flashing LED- Pulsout command
- 426-Infrared 30 Tunes Test
- 427-4 Alternating Fading LED's
- 428-Infrared Flashing Photo Frame



- 701-7 Segment -Small Display 0-9
- 702-7 Segment -Small Display 9-0
- 703-7 Segment -Jumbo Infrared 0-9
- 704-7 Segment -Large Student Built
- 705-7 Segment -Small Single Board Display 0-99
- 706-7 Segment -Jumbo Push Button Activated
- 707-7 Segment -Small Display -Push Button Count down 9-0
- 708-7 Segment -Jumbo Infrared 14M SES
- 709-7 Segment -Small Display Push Button Count up
- 710-7 Segment -Small Display Dual Board 0-99
- 711-7 Segment -Small Display Electronic Dice
- 712-7 Segment -Small Display-Infrared Display
- 713-7 Segment -Small Display-Infrared SES
- 714-7 Segment -Small 4 Switch Binary Counter Demo
- 715-7 Segment -Small 1 Switch Binary & Decimal Counter
- 716-7 Segment -Jumbo 7 Switch Demo
- 717-

- 601-LCD- Time & Date
- 602-LCD- Your own message
- 603-OLED- Infrared active messages
- 604-OLED- Ultra Sonic-Distance Out
- 605-OLED- Switch activated message
- 606-OLED- Karaoke Machine
- 607-OLED- 20 x 4
- 608- LCD-Italian No's
- 609-OLED- Scrolling LED Message
- 610-OLED- Temperature Display
- 611-OLED- 6 x Times tables Test
- 612-OLED- My Sport Test

- 501-Temperature via Debug
- 502-LDR Shadow Sensor Fan
- 503-Ultra Sonic Distance Measurement
- 504-LDR Colour Light Sensor
- 505-Push Button- Pedestrian Traffic Lights
- 506-24 Volt Mechanical Counter
- 507-Sun smart Fabric Tester
- 508-Reed Switch-Security Door Alarm-Audible/Silent
- 509-Temperature Sensor Reading
- 510-Infrared remote No Clicks
- 511-OLED- Temperature Sensor Display
- 512-Ultrasonic Reversing Beeper
- 513-Infrared LED's On -Off
- 514-Spirit Level Mercury Switch