

- Network Sites:
 - Latest
 - Manufacturing Technologies For Increased Productivity and Reduced Costs
 - Robot Collision Recovery and Prevention
 - AI-based Bin Picking Software for Collision and Singularity-free Sortation
 - Git Version Control - Back Up Automation Code Seamlessly
 - Feedback for Fluid Cylinders: Bang Bang Control
 - News
 - Technical Articles
- Latest
 - XBM-DN32H2 PLC Tank Rover Robot Project
 - unoFone
 - DIY Steering Wheel
 - HOW TO CREATE A 3D RAMP TOY USING 3D MODELLING SOFTWARE
 - How to Control RGB LED Wirelessly using ESP8266 ESP01
- Projects
- Education
- Latest
 - Breakthroughs by NASA, Others Aim to Cut EV Charging Times
 - General Motors Energy is Building an Electrified Future
 - SuperBattery Lowers Charging Times 80% in EV Mining Trucks
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- Technical Articles
- Market Insights
- Education



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From the Ground Up—Zoox Turns a Corner with New AV and Sensor System Designs

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- Articles
 - Latest
 - What is Clock Skew? Understanding Clock Skew in a Clock Distribution Network
 - NXP Development Platform Aims to Unify Car Wireless Connectivity
 - Google Announces New Open-source OS for RISC-V Chips
 - IBM Touts SoC as Solution for Faster Deep Learning Training
 - News
 - NXP Development Platform Aims to Unify Car Wireless Connectivity
 - Google Announces New Open-source OS for RISC-V Chips
 - IBM Touts SoC as Solution for Faster Deep Learning Training
 - ST Drives Up Innovations with Three Automotive Chips
 - Projects
 - TinyML In Action—Creating a Voice Controlled Robotic Subsystem
 - Construction of a Guitar Amplifier

- Predicting Battery Degradation with a Trinket M0 and Python Software Algorithms
- How to Build an Analog Sensor and Analog Output Using Microchip's RN487x Bluetooth Module
- Technical Articles
 - What is Clock Skew? Understanding Clock Skew in a Clock Distribution Network
 - Fourier Series Circuit Analysis—An Intro to Fourier Series Representation
 - Thermocouple Signal Conditioners and Signal Conditioning Near the Cold Junction
 - RTD Basics—An Introduction to Resistance Temperature Detectors
- Industry Articles
 - Design and Selection of Magnetic ICM Modules to Ease Ethernet EMI/EMC Challenges
 - Considerations for Choosing Edge ML Application Hardware
 - Understanding Illumination: LED Lighting Solutions For Battery-powered Electronics
 - Dependability in Zonal E/E Architectures with Central Compute for Autonomous Driving
- Industry White Papers
 - Using Physical and Scalable Simulation Models to Evaluate Parameters and Application Results
 - Trapezoidal Control of BLDC Motors
 - Debugging Conducted Emissions with Oscilloscopes Made Easy
 - The EV Charging Infrastructure Designbook, Volume One: Power Stages
- Forums
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44 minutes ago
 - How is voltage sensing and current sensing implemented?
44 minutes ago
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an hour ago
 - Hardware Design
 - Output logic source and sink
2 hours ago
 - Bad microwave PCB?
3 hours ago
 - 12 vdc Inductive ignition timing light bulb weak flash?
4 hours ago
 - Car microphone pinout help
4 hours ago
 - Embedded & Programming

- Is it possible to use a microcontroller to convert encoder s...
7 hours ago
 - Digital Input PIC16F648A
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 - Digital Control of dc motor question advice
2 hours ago
 - Input resistance
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yesterday
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3 days ago
 - The Big Misconception About Electricity
5 days ago
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8 days ago
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 - Members Directory
 - Member Blogs
 - Members Online
 - Off-Topic
 - Marketplace
- Education
 - Textbooks

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- Industry Virtual Workshop: Using Accelerometers Made for Industry 4.0 and Smart Factories

- Tools

- Calculators

- View All Calculators
 - Analog
 - Connectors
 - Digital ICs
 - EDA
 - Electromechanical
 - General
 - Optoelectronics
 - Passives
 - PCB
 - Power
 - Wireless/RF

- Part Search

- Search
 - Amplifier Circuits
 - Attenuators
 - Audio Components
 - Batteries
 - Capacitor
 - Circuit Protection
 - Clock and Timing
 - Communication
 - Computer Products

- Connectors
- Controllers
- Converters
- Diodes, Transistors and Thyristors
- Displays
- Driver and Interfaces
- Electromechanical Switches
- Electronic Switches
- EMI/RFI Suppression
- Encoders
- Filters
- LEDs and LED Lighting
- Logic
- Magnetics
- Memory
- Microcontrollers and Processors
- Motors
- Optoelectronics
- Power Management
- Programmable Devices
- Resistors
- RF and Microwave
- Sensors
- Solar
- Thermal Management
- Wire and Cable
- Test Equipment Database
 - View All Equipment
 - Oscilloscopes
 - Logic Analyzers
 - Waveform Generators
 - Spectrum Analyzers
 - Multimeters
 - TDRs
 - Network Analyzers
 - Source Measure Units
 - IV Curve Tracers
 - Electronic Loads
 - Search
- Bom Tool
 - Create BOM
 - View Your BOMs
- IC Design Center
 - Arithmetic Core
 - Communication Controller
 - Crypto Core
 - ECC Core
 - Memory Core
 - Processor
 - Prototype Board
 - System Controller
 - System on Chip
 - System On Module
 - Testing / Verification

- Video Controller
- Uncategorized
- Videos
 - Latest
 - Designing Industrial Connectivity Solutions for the Smart Factory
 - Microchip AVR DA 8-Bit Microcontrollers | Asia Featured Product Spotlight
 - TVS Diodes: Excellent ESD Protection for ICT and Consumer Applications
 - RECOM Power RACM60-K 60W Multi-Purpose AC/DC Converters | New Product Brief
 - New Products
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 - IXYS High-Side & Low-Side Gate Driver ICs | New Product Brief
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 - The Bipolar Junction Transistor (BJT) as a Switch
 - Current and Voltage Relationships in Bipolar Junction Transistors (BJTs)
 - Introduction to the Operation of Bipolar Junction Transistor (BJT)
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 - TVS Diodes: Excellent ESD Protection for ICT and Consumer Applications
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 - Putting The Spotlight On Laserlight SMD Tech Chat | KAVX and Mouser Electronics
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 -
 -
 -
 -
- - Network Sites:
 -
 -
 -
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HaMZaBeST · Apr 26, 2014

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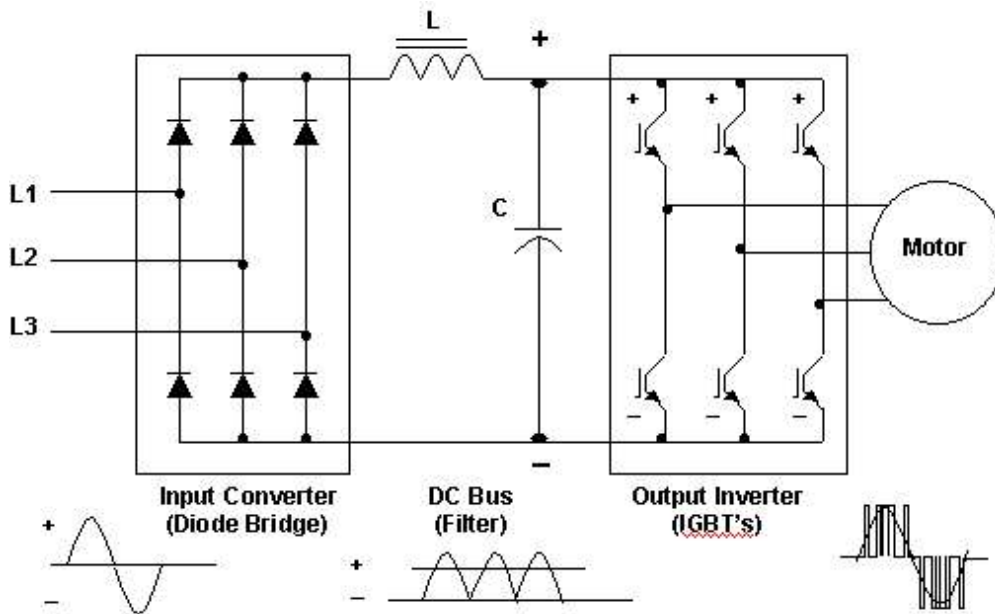
Thread Starter
HaMZaBeST

#1

Joined Dec 13, 2013 3

Apr 26, 2014

i want to generate 3 PWM 120 degrees out of phase with arduino [mega2560](#) because i want to control six phase igbt to control 3 phase motor (220v/380v // $f=50\text{hz}$ // $\text{rpm} = 1430$) and display the frequency in LCD .0



i know i want using timer1/timer2

i found this code but i have some problems with output frequency

can you help me to fix the code for my arduino mega 2560 and thx.

Rich (BB code):

```

111 phase_accum += tword_m; // soft DDS, phase accu with 32 bits
112 icnt = phase_accum >> 24; // use upper 8 bits for phase accu as frequency i
113 OCR2A = pgm_read_byte_near(sine256 + icnt); // read value from ROM sine tab
114 OCR1A = pgm_read_byte_near(sine256 + (uint8_t)(icnt + OFFSET_1));
115 OCR1B = pgm_read_byte_near(sine256 + (uint8_t)(icnt + OFFSET_2));
116 if (icnt1++ == 125) // increment variable c4ms every 4 milliseconds
117 {
118     c4ms++;
119     icnt1 = 0;
120 }

```

```
121 | cbi(PORTD, TEST_PIN); // reset PORTD,TEST_PIN
122 | }
```



jaydip

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GetDeviceInfo

Joined Jun 7, 2009 2,110

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#2

check the atmel site, they have code snippets for this very thing.

Silas de Almeida Baldez

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#3

GetDeviceInfo said: 

check the atmel site, they have code snippets for this very thing.

i download the doc of [atmega2560](#) i read but how can i fixe the value of frenquence in 0 to 50HZ ?

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#4

can you give some help

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sirch2

Joined Jan 21, 2013 1,029

May 1, 2014

#5

May be better to ask this on the Arduino Forum

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- Calculators
- Datasheets
- Giveaways
- Industry Articles
- Industry Tech Days
- Virtual Workshons

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“

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