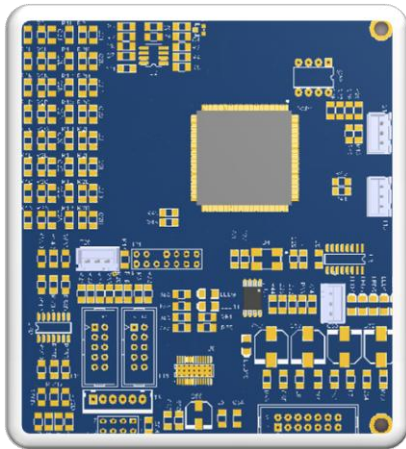




DSP Controller Board



برد راه انداز پردازنده TMS320F28335

- ❖ دارای ۱۶ کانال ADC ۱۲ بیت
- ❖ مناسب برای کلیه کاربردهای پردازش سیگنال
- ❖ دارای پورت CAN و RS232
- ❖ جدا سازی خروجی های PWM
- ❖ قرار گرفتن ورودی های ADC در ترمینال های مجزا
- ❖ دارای حافظه EEPROM
- ❖ دارای اسپلاتور ۳۰ مگاهرتز

مشخصات فنی برد

ولتاژ تغذیه	۵ V
حداکثر جریان مصرفی	۲۵۰ mA
تعداد خروجی PWM	۱۲ عدد
تعداد GPIO در دسترس	۵۰ عدد
تعداد ورودی آنالوگ	۱۶ عدد
ابعاد طول×عرض×ارتفاع (سانتی متر)	۱×۱۰×۱۰
تعداد LED متصل به GPIO	۵ عدد

مشخصات فنی پروسیسور استفاده شده

- Highlights
 - High-Efficiency 32-Bit CPU (TMS320C28x™)
 - 60-MHz, 50-MHz, and 40-MHz Devices
 - Single 3.3-V Supply
 - Integrated Power-on and Brown-out Resets
 - Two Internal Zero-pin Oscillators
 - Up to 22 Multiplexed GPIO Pins
 - Three 32-Bit CPU Timers
 - On-Chip Flash, SARAM, OTP Memory
 - Code-security Module
 - Serial Port Peripherals (SCI/SPI/I2C)
- Low Device and System Cost:
 - Single 3.3-V Supply
 - No Power Sequencing Requirement
 - Integrated Power-on and Brown-out Resets
 - Small Packaging, as Low as 38-Pin Available
 - Low Power
 - No Analog Support Pins
- Clocking:
 - Two Internal Zero-pin Oscillators
 - On-Chip Crystal Oscillator/External Clock Input

- Enhanced Control Peripherals
 - Enhanced Pulse Width Modulator (ePWM)
 - High-Resolution PWM (HRPWM)
 - Enhanced Capture (eCAP)
 - Analog-to-Digital Converter (ADC)
 - On-Chip Temperature Sensor
 - Comparator
 - 38-Pin and 48-Pin Packages
 - High-Efficiency 32-Bit CPU (TMS320C28x™)
 - 60 MHz (16.67-ns Cycle Time)
 - 50 MHz (20-ns Cycle Time)
 - 40 MHz (25-ns Cycle Time)
 - 16 x 16 and 32 x 32 MAC Operations
 - 16 x 16 Dual MAC
 - Harvard Bus Architecture
 - Atomic Operations
 - Fast Interrupt Response and Processing
 - Unified Memory Programming Model
 - Code-Efficient (in C/C++ and Assembly)
 - Endianness: Little Endian
 - Dynamic PLL Ratio Changes Supported
 - Watchdog Timer Module
 - Missing Clock Detection Circuitry
 - Up to 22 Individually Programmable, Multiplexed GPIO Pins With Input Filtering
 - Peripheral Interrupt Expansion (PIE) Block That Supports All Peripheral Interrupts
 - Three 32-Bit CPU Timers
 - Independent 16-Bit Timer in Each ePWM Module
 - On-Chip Memory
 - Flash, SARAM, OTP, Boot ROM Available
 - 128-Bit Security Key/Lock
 - Protects Secure Memory Blocks
 - Prevents Firmware Reverse Engineering
 - Serial Port Peripherals
 - One SCI (UART) Module
 - One SPI Module
 - One Inter-Integrated-Circuit (I2C) Bus
 - Advanced Emulation Features
 - Analysis and Breakpoint Functions
 - Real-Time Debug via Hardware
 - 2802x, 2802xx Packages
 - 38-Pin DA Thin Shrink Small-Outline Package (TSSOP)
 - 48-Pin PT Low-Profile Quad Flatpack (LQFP)
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