

# Target Support Package TC6 Jumpstart Service

Target Support Package™ TC6 Jumpstart Service is a four-day engagement that provides a systematic and rapid introduction to the tools and processes required to integrate MATLAB®, Simulink®, and Stateflow® for Model-Based Design with Texas Instrument's eXpressDSP™ tools for use with the TI C6000™ family of processors. It is intended for embedded system engineers who work with the Texas Instruments DSP hardware for developing real-world control and signal processing applications. By the end of the engagement, you will have learned to design, develop and validate control algorithms or signal/image processing algorithms from concept to hardware-specific code through modeling, code generation, prototyping, and embedded systems deployment.

## Service Topics

### Using the target for the TI C6000

- Setting up models for automatic code generation
- Working with the target configuration blocks
- Defining memory maps and using available flash memory with the flash-burn plug-in
- Profiling and optimizing the generated code

### Using Embedded IDE Link CC for tool automation

- Overview of the single-step build-and-download processes using Embedded IDE Link™ CC (for TI's Code Composer Studio™)
- Scripting of Code Composer Studio operations
- Use of RTDX for host-target communication

### Using device drivers and interrupts

- Configuration and use of the peripheral devices for video and audio
- Modeling of asynchronous task scheduling using hardware interrupts and tasks for bareboard and DSP/BIOS-based operation (when applicable)
- Network support using TCP/IP and UDP target side blocks

### Using custom libraries

- Creating and reusing custom libraries using Target Function Library (TFL) replacement functions
- Building custom device drivers using the Legacy code integration features

### Exploring domain-specific application examples

- Audio processing
- Video processing

The service will use the appropriate DSK or EVM for the supported target hardware chosen by the customer, when possible, or from the following options:

- TMS320C6713 for audio applications
- TMS320DM6437 or TMS320DM642 for video applications

On the last day of the engagement, the consultant will work on a representative example from the customer's application with individual team members. This approach allows participants to make optimal use of Model-Based Design by learning best practices from the consultant.

#### Service Details

**Prerequisites:** Background in control and signal processing on embedded targets required; basic knowledge of C and MATLAB and Simulink fundamentals recommended

**Required equipment and software:** A laptop computer, with the appropriate software installed, for each attendee

**Duration:** Four days

**Location:** Onsite or at a MathWorks training facility

**Maximum number of attendees:** Five

#### Ordering Options

You can order the Target Support Package TC6 Jumpstart Service when you purchase the software or at a later date. Contact your MathWorks sales representative for details.

#### Learn More

Consulting Services  
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