



# Extreme Manufacturing

## *Features List*

### **New Features...**

1. Share the same customizable CDB files between XSCSI and XMFG!
2. Read and Write to buffers using new Structured Filter definitions from CommandGen
3. New CDB File Format automatically calculates data length field!
4. Canned Tests and Command functions now available in the Extreme Manufacturing API to integrate into your own executables.
5. MULTITHREAD command allows multiple scripts/commands to run on a single device simultaneously.
6. New tagged queuing and CSMIcommand modes for better support.

### **Remote Control Functions**

Extreme Manufacturing offers complete remote control functionality via ControlCenter and/or our Xsocket library. You can monitor and/or control all Extreme Manufacturing installations from your office or anywhere on your LAN, WAN or the Internet.

### **I. Core Functionality**

#### **A. Variables**

1. Create and Manipulate variables (INT,FLOAT,STRING) and arrays with complex mathematical operators and a wide array of options.
2. New Struct variables provide higher-level command definition and buffer parsing. Refer to logical blocks by name, rather than as byte X.

#### **B. Flow Control**

1. Use single or multiple expression WHILE and IF statements to control script flow.
2. Use Subroutines and Labels to organize and manage script flow.
3. Use our INCLUDE Preprocessor Directive to INCLUDE a script anywhere in another script. All of that scripts variables and subroutines are then accessible.
4. Use our LAUNCH command to run any executable or batch file from within a script.
5. Script Synchronization allows different scripts on different devices to synchronize.
6. *Stop/Start/Pause/Assign Scripts* - For in-script control of any device's execution.
7. Create complex test scripts in seconds that allow you to ...
8. Exit Program functionality allows you to use Extreme Manufacturing as a command line option in your own master scripts. The program can be made to exit once execution is complete
9. MULTITHREAD command allows multiple scripts/commands to run on a single device simultaneously.

### **C. Error Management**

1. Use Sophisticated Error Handlers to take a wide variety of actions based on user-defined error criteria.
2. Track Specific errors for decision making and logging
3. Set error limits based on user-defined error criteria

### **D. Buffer Management**

1. Load/Save any program device buffer (Read,Write,Sense,Scratch) from or to file.
2. Compare any two program device buffers or compare a buffer to file.
3. Fill any program device buffer with pre-defined or user-defined patterns.
4. Setup complex embedding options for canned write tests
5. Write or Read values to or from any device buffer.
6. Search for values in any device buffer
7. Create and free a user-defineable Scratch buffer.
8. Read and Write to buffers using new Structured Filter definitions from CommandGen

### **E. Device Configuration**

1. Set command timeout values and command retry limits.
2. Set up individual command traces
3. Refresh vital inquiry, capacity and defect list statistics
4. Reset the Device State for any device. This changes color and state text displayed.

### **F. Operating System Calls**

1. Copy, move, delete, print and obtain the size of files
2. Create Directories and Set Current Working Directory
3. Write variables, buffers or any other data to file
4. Pop up a MessageBox with user-defined text to screen.

## **II. SCSI Commands**

1. Issue any SCSI command to any device with the ability to use variables to replace any byte in the CDB. Choose from a pre-defined set of hundreds of commands with full GUI CDB creation, or just manually type in your own CDB.
2. Share the same customizable CDB files between XSCSI and XMFG!
3. New CDB File Format automatically calculates data length field!

## **III. Canned Routines**

### **A. Common**

1. Download Microcode to any target
2. RESET individual SCSI Buses or cause LIP's on individual Fibre Channel Loops
3. Setup Tagged Command Queueing options for canned read and write tests.
4. Setup CDB Size (10,12, or 16 byte) for canned read, write and verify tests.

### **B. Direct Access**

1. Fully customizable read, write, write/read, verify and seek testing with full logging.
2. Fully customizable start/stop testing.
3. Media Corruption tool.

**C. Sequential Access**

1. Fully customizable read testing
2. Fully customizable write testing
3. Fully customizable motion testing

**IV. Tools****A. Email**

Extreme Manufacturing's scripting language includes everything you will need to create and send email's in-script with attachments.

**B. FTP**

FTP files to and from any accessible FTP site in-script.

**C. Voltage Margining**

Control voltage and current (if supported) to your programmable power supply.