

# ACCEL/DFI Generation 7+ ECM

**Digital Fuel Injection: CalMap for Gen 7+ Engine Management Systems**

File Fuel Ignition Idle Control Nitrous Data Logging Configuration Diagnostics Help

Nitrous S1 High Res. Ign. Trim (Deg.) Min = -32.000 Max = 32.000

	0.0000	0.5164	1.0328	1.5491	2.0655	2.5819	3.0982	3.6146	4.1310	4.6474	5.1638	5.6801	6.1965	6.7129	7.2292	7.7456
13.44	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
19.29	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
25.14	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
31.00	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
36.85	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
42.70	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
48.55	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
54.40	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
60.26	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
66.11	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
71.96	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
77.81	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
83.66	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
89.52	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
95.37	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00
101.22	0.00	-1.00	-1.64	-2.29	-2.93	-3.57	-4.21	-4.86	-5.50	-6.14	-6.79	-7.43	-8.07	-8.71	-9.36	-10.00

Manifold Pressure KPa Forced  0.00

N1 RawPwm Tmr: 0.0000    MAP: 13.4    Base Advance: 20.0    NOS Advance: 0.00    Total Advance: 0.0    Knock Retard: 0.00

Overlay    3D Graph

[ ] Change selected cell values  
 +,P Add to selection, X Multiply selection  
 RIGHT-CLICK or I Interpolate Selection

↑ Increase/Decrease rate of change  
 SHIFT+Arrows Select cells  
 T Toggle Trace Mode / U Clear Trace

ENTER Send changes to ECM  
 SPACE Select current operating point  
 CTRL-Z Undo last operation

RPM: 0    SPARK: 0.00    MAP: 13.44    ECT: -40    HEGO: 0.47    O2 FBK: 0.0

Closed Loop Correction: Rich (left) / Lean (right)    Error Code: 23

Online (F9)    HELP (F1)    CALMAP GEN 7+ 11

Windows taskbar: Start, 3:17 PM

## VERSION 6.0 UPGRADE

THE FOLLOWING CHANGES CORRESPOND TO CALMAP SOFTWARE VERSIONS 6.0 AND HIGHER, AND ACCEL/DFI GENERATION 7+ ENGINE CONTROL MODULES WITH FIRMWARE REVISIONS OF 6.0 AND HIGHER.

IF YOU HAVE ANY GENERATON 7 ECM WITH AN EARLIER FIRMWARE REVISION, CONTACT YOUR LOCAL EMIC DEALER FOR DETAILS ON HOW TO UPGRADE YOUR MODULE TO THE LATEST VERSION OF FIRMWARE.

A DEALER LISTING IS LOCATED ON THE WEB AT (<http://mrgasket.com/>). CLICK ON THE ACCEL/DFI LOGO LOCATED AT THE BOTTOM OF THE HOME PAGE.

## **USB-Based CalMap Cables with Integrated Security Keys**

ACCEL/DFI CalMap Software now contains support for USB-based communication cables. In addition, these new communication cables can optionally contain embedded Power Keys to deliver 3 customized levels of interface software access. This will eliminate the need for an external connection to an ACCEL/DFI security key through a Parallel or USB data port.

The CalMap software installer will now initiate the installation of a USB driver for support of the new USB-based CalMap cables. Follow the on-screen instructions for the installation of the driver. Once finished, reboot the PC and insert the USB cable. Verify that the cable is detected properly by opening up your System Control Panel and selecting the Device Manager. The cable should be listed under "Ports – COM & LPT". Note the communications port number listed after the "Prolific USB-to-Serial Com Port". You will need to specify that port number when using the cable with CalMap the first time only. CalMap will remember to use that port number as it's default communications port in the future.

When reinstalling CalMap in the future, reinstallation of the USB driver is not needed. Cancel the reinstallation of the USB driver if it is already installed and working on your PC. The same USB driver is used for all variations of the ACCEL/DFI USB-based cables.

The USB cables now may contain one of 3 different levels of security keys integrated into them. CalMap software version 6.0 or higher is required to use the integrated security key. In order to utilize the security key within the cable, it is necessary to remove all previous versions of the security keys from any other USB or Parallel ports on the computer. Older security keys will override the ones integrated within the new USB cables. The new USB cables will function properly with earlier versions of CalMap software, but the integrated key will not be recognized. In this case, an older security key may be used if needed.

## **Linear and Bilinear Interpolation on 2D and 3D Calibration Tables**

All 16x16, 8x8, 4x4, and 1x16 sized calibration tables now offer linear interpolation as an option for advanced data editing. This feature is very useful for quickly filling out regions of a calibration table, and can be used to quickly set a group of data points to a set of values that blends those cells into the surrounding data values.

CalMap Location: Right-Click or press 'I' from any calibration table

## **Time-Based Ignition Trim Tables for Stage 1 and 2 Nitrous Controllers**

Added support for Nitrous Stage 1 and Stage 2 3D Ignition Trim Tables to be looked up vs. PWM Timer axis when (1) Nitrous PWM and (2) Time-based control are BOTH enabled for Nitrous Stage 1 or Stage 2 ONLY. This gives the option to program Ignition Trim values vs. time for both stages 1 and 2 of the Nitrous controller.

CalMap Location: Nitrous Oxide Controller Stage 1, 2, and PWM Configuration.

## **CalMap Software Compatibility Note**

This and all future versions of ACCEL/DFI CalMap software will now require Microsoft Windows 2000, or XP operating systems as a prerequisite for software installation. Proper operation on operating systems other than Windows 2000 or Windows XP cannot be guaranteed, and is not officially supported at this time.

Windows Vista support will be provided as free update in the form of a future release of the entire software installation package.