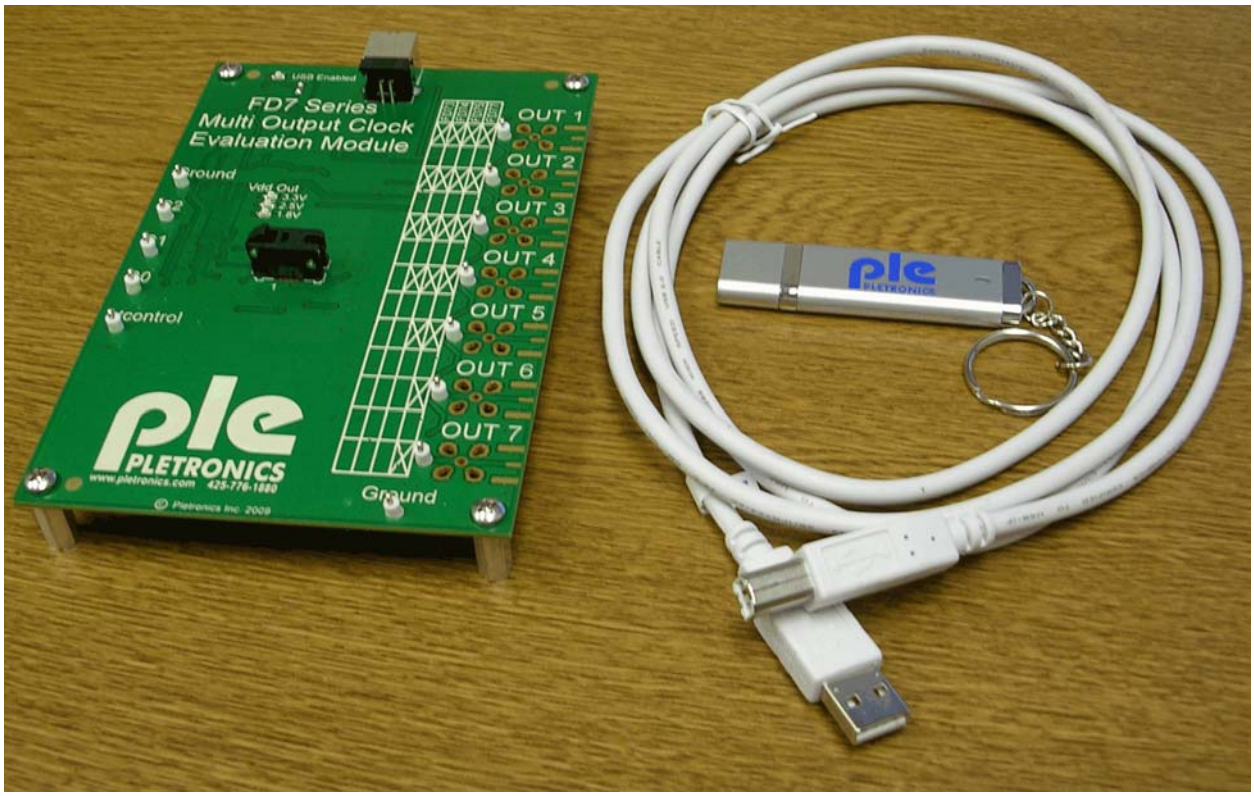
FD7 Series Multi-Output CMOS Clock Oscillator Evaluation and Programming Board

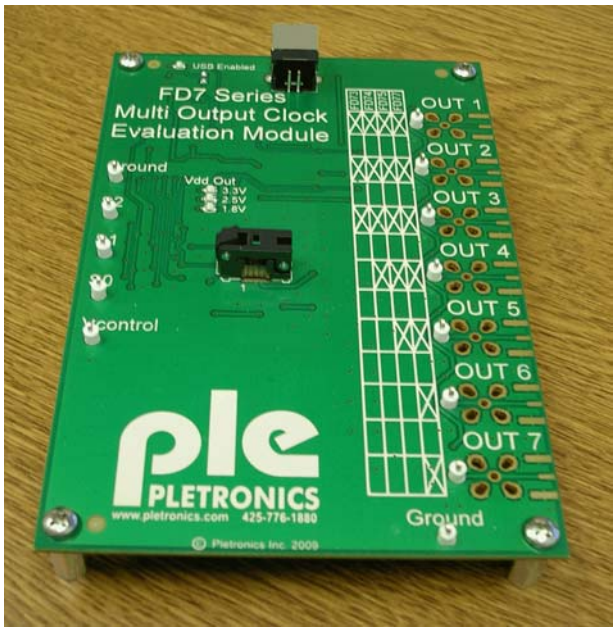
March 2010



Features:

- Permits programming the FD7 family of multi-output CMOS oscillators
- Permits duplicating the program on additional oscillators
- Operates the FD7 family, outputs can be evaluated, control inputs S0, S1 and S2 can be computer set or user set
- The FD7 family is programmed via the evaluation board's I^2C interface
- Uses the data from the FD7 family design software
- Operates the FD73, FD74, FD75 and FD77 devices; socket provided
- Powered and controlled by the USB bus
- Windows based software for the PC
- Software supplied on a USB memory stick
- No special driver installation required
- Optional BNC vertical or right angle connectors, SMA vertical or SMA side mount connectors for each output can be added
- Output buffers can be operated at 1.8V, 2.5V and 3.3V

Operation:



The evaluation board operates as a Human Interface Device (HID) using the standard Windows® driver.

Plug the Evaluation Board into the PC's USB port and the "USB Enabled" LED on the Evaluation board will illuminate indicating connectivity between the PC and the Evaluation Board.

Run the Evaluation Board program to permit:

- Setting the control source for the S0, S1 and S2 pads of the FD7. These can be user-input voltages on the terminals provided or the levels set by the Evaluation Program.
- Setting the Evaluation levels for the S0, S1 and S2 inputs when controlled by the Evaluation Program.
- Reading and interpreting the program stored in the FD7 if it has not been protected.
- The Evaluation Board can program devices where the S2 and S3 inputs are programmed for static inputs (I^2C disabled). The Evaluation Board performs the programming and returns the S2 and S3 inputs to being static inputs.
- Using the FD7 development program (EXCEL), define the FD7 function, use the Evaluation Program to write the developed program into the FD7.
- Reading the I^2C address of the FD7 to determine if it is an FD73, FD74, FD75 or FD77 device.
- $V_{CONTROL}$ input is provided for the case where the VCXO function is enabled.
- The FD7 device outputs (up to the 7) are all available on testing points. These are the unbuffered device outputs. There are locations on the Evaluation Board where the user can add loads.
- The FD7 output buffer voltage can be set by the Evaluation Program to 1.8V, 2.5V or 3.3V.

Coaxial Connector Options:

The Evaluation Board is configured to accept several coaxial connector types. The basic Evaluation board is supplied with test points which are easily connected to with scope probes.

Pasternack Enterprises PN: PE4117 Vertical mounted female SMA 	Pasternack Enterprises PN: PE4543 PCB edge mounted female SMA 
Tyco/Amp PN: 5222006-1 Vertical mounted female BNC 	Tyco/Amp PN: 413631-1 Right angle female BNC 

Part Number:

The part numbers and options for ordering are:

FD7-EVAL01-*ff.f*M

where *ff.f* is the crystal frequency in MHZ used in the FD7.
Standard available part numbers are:
FD7-EVAL01-25.0M
FD7-EVAL01-24.576M (Note: 24.576MHz / 750 = 32.768KHz)

1 each Evaluation board including a 14 pad clam shell socket for the FD7 device
1 each Memory Stick with Evaluation and programming software
Includes: Instruction manual, Evaluation board schematics, parts list and device data sheets
For Windows® 2000, XP Pro, Vista and System 7
1 each USB cable
5 each FD7745TE-*ff.f*M devices

FD7-EVAL01-ff.fMBV
Same as the FD7-EVAL01-ff.fM with vertical BNC connectors

FD7-EVAL01-ff.fMBR
Same as the FD7-EVAL01-ff.fM with right angle BNC connectors

FD7-EVAL01-ff.fMSV
Same as the FD7-EVAL01-ff.fM with vertical SMA connectors

FD7-EVAL01-ff.fMSE
Same as the FD7-EVAL01-ff.fM with edge SMA connectors

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