

# TimeFlash 2 Field Programming Kit

## Configure Your Oscillators Instantly

Wouldn't it be nice to be able to quickly customize your oscillators to any frequency, anywhere? With Microchip's TimeFlash 2 Field Programming Kit, it's all possible.

The TimeFlash2 programmer allows users to program Microchip's field programmable oscillators to a custom frequency in seconds enabling fast prototyping and testing. This tool, now in its second generation, has the ability to measure frequency accuracy and power consumption of standard oscillators, regardless of vendor, making it a valuable lab tool for engineers. Microchip's oscillators are available in industry standard packages that are drop-in replacements to standard crystal oscillators.



### Features and Benefits

- Custom frequencies in seconds with immediate design verification
- Supports all Microchip MEMS oscillator package sizes
- Supports CMOS, LVPECL, LVDS, and HCSL output types
- Easy-to-use interface with auto software update
- Measures current and stability
- Test features work with all oscillators in the market

The TimeFlash 2 Programmer is used with device-dependent socket cards and the appropriate DSC8XXX or DSC6XXX devices.

### Kit Contents

- Portable programming dongle
- USB cable
- Antistatic tweezers
- USB Flash drive for installing the software

*Portable USB-Powered Programmer Allows Easy Configuration*



### Kit Specifications

Feature	Specification
<b>Programmer Power Supply</b>	Supplied through USB cable (micro USB to USB A)
<b>Oscillator Operating Supply Voltage</b>	1.8V–3.6V
<b>Programming Time</b>	2 seconds
<b>Operating System Supported</b>	Windows® 7, 8.1 and 10
<b>Programmer Size</b>	2.5 × 1.25 × 0.5 in (63.5 × 31.75 × 12.7 mm)
<b>Programmer Weight</b>	0.2 lb (90 g)

*Complete Solution Enables Fast Prototyping*



## Ordering Information

For programming of devices, a TimeFlash 2 programmer and an appropriate socket card kit are required. You can order an appropriate socket card with the socket size that matches your selected device, or you can purchase extended kits that offer either two socket cards, or all six cards.

Part Number	Description
DSC-TimeFlash2-Kit1	TimeFlash 2 Field Programming Kit with all 6 cards (7.0 × 5.0 mm, 5.0 × 3.2 mm, 3.2 × 2.5 mm, 2.5 × 2.0 mm, 2.0 × 1.6 mm), programmer, USB cable, tweezers and installation USB Flash drive
DSC-TimeFlash2-Kit2	TimeFlash 2 Field Programming Kit with 2 cards (3.2 × 2.5 mm, 2.5 × 2.0 mm), programmer, USB cable and tweezers
DSC-PROG-7050	Single socket card (7.0 × 5.0 mm) with blank DSC8001 parts for TimeFlash 2 Field Programming Kit
DSC-PROG-5032	Single socket card (5.0 × 3.2 mm) with blank DSC8001 parts for TimeFlash 2 Field Programming Kit
DSC-PROG-3225	Single socket card (3.2 × 2.5 mm) with blank DSC8001 parts for TimeFlash 2 Field Programming Kit
DSC-PROG-2520	Single socket card (2.5 × 2.0 mm) with blank DSC8001 parts for TimeFlash 2 Field Programming Kit
DSC-PROG-2016	Single socket card (2.0 × 1.6 mm) with blank DSC6101 parts for TimeFlash 2 Field Programming Kit
DSC-PROG-1612	Single socket card (1.6 × 1.2 mm) with blank DSC6101 parts for TimeFlash 2 Field Programming Kit

The kits, socket cards and black supported devices are available from microchipDIRECT ([www.microchipdirect.com](http://www.microchipdirect.com)) or from Microchip's worldwide distribution network.

## Supported Devices

TimeFlash 2 Part Number	Equivalent Programmed Part Number	Description	Packages	
DSC8001	DSC1001	Low-power CMOS MEMS oscillator	A = 7.0 × 5.0 mm B = 5.0 × 3.2 mm C = 3.2 × 2.5 mm D = 2.5 × 2.0 mm	
DSC8002	DSC1033	Low-power CMOS MEMS oscillator		
DSC8003	DSC1003	Low-power CMOS MEMS oscillator with 25 pf output drive strength		
DSC8004	DSC1004	Low-power CMOS MEMS oscillator with 40 pf output drive strength		
DSC8101	DSC1101	Low-jitter, precision, CMOS MEMS oscillator with standby		
DSC8102	DSC1102	Low-jitter, precision, LVPECL MEMS oscillator with standby		
DSC8103	DSC1103	Low-jitter, precision, LVDS MEMS oscillator with standby		
DSC8104	DSC1104	Low-jitter, precision, HCSSL MEMS oscillator with standby		
DSC8121	DSC1121	Low-jitter, precision, CMOS MEMS oscillator with OE		
DSC8122	DSC1122	Low-jitter, precision, LVPECL MEMS oscillator with OE		
DSC8123	DSC1123	Low-jitter, precision, LVDS MEMS oscillator with OE		
DSC8124	DSC1124	Low-jitter, precision, HCSSL MEMS oscillator with OE		
DSC6003-000.0000	DSC6003XXXA-XXX.XXXX	Ultra-low power MEMS oscillators with OE and low drive		C = 3.2 × 2.5 mm J = 2.5 × 2.0 mm M = 2.0 × 1.6 mm H = 1.6 × 1.2 mm
DSC6013-000.0000	DSC6013XXXA-XXX.XXXX	Ultra-low power MEMS oscillators with standby and low drive		
DSC6101-000.0000	DSC6101XXXA-XXX.XXXX	Low-power, precision MEMS oscillators with OE		
DSC6111-000.0000	DSC6111XXXA-XXX.XXXX	Low-power, precision MEMS oscillators with standby		
DSC6001-000.0000	DSC6001XXXA-XXX.XXXX	Ultra-low power MEMS oscillators with OE		
DSC6011-000.0000	DSC6011XXXA-XXX.XXXX	Ultra-low power MEMS oscillators with standby		
DSC6103-000.0000	DSC6103XXXA-XXX.XXXX	Low-power, precision MEMS oscillator with OE and low drive		
DSC6113-000.0000	DSC6113XXXA-XXX.XXXX	Low-power, precision MEMS oscillator with standby and low drive		
DSC6102-000.0000	DSC6102XXXA-XXX.XXXX	Low-power, precision MEMS oscillator with OE and high drive		
DSC6112-000.0000	DSC6112XXXA-XXX.XXXX	Low-power, precision MEMS oscillator with standby and high drive		

## Resources

- TimeFlash 2.0 PC Software Setup [www.microchip.com/mymicrochip/filehandler.aspx?ddocname=en598688](http://www.microchip.com/mymicrochip/filehandler.aspx?ddocname=en598688)
- TimeFlash 1.4 PC Software Setup [www.microchip.com/mymicrochip/filehandler.aspx?ddocname=en587117](http://www.microchip.com/mymicrochip/filehandler.aspx?ddocname=en587117)
  - TimeFlash PC software works with 1st generation TimeFlash programmer only
- For additional support, please email us at [TimeFlashSupport@microchip.com](mailto:TimeFlashSupport@microchip.com)

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