# **PTC**<sup>®</sup>

Mathcad<sup>®</sup> Prime<sup>™</sup> 2.0 Keyboard Shortcuts December 2011

### Copyright @ 2011 Parametric Technology Corporation and/or Its Subsidiary Companies. All Rights Reserved.

User and training guides and related documentation from Parametric Technology Corporation and its subsidiary companies (collectively "PTC") are subject to the copyright laws of the United States and other countries and are provided under a license agreement that restricts copying, disclosure, and use of such documentation. PTC hereby grants to the licensed software user the right to make copies in printed form of this documentation if provided on software media, but only for internal/personal use and in accordance with the license agreement under which the applicable software is licensed. Any copy made shall include the PTC copyright notice and any other proprietary notice provided by PTC. Training materials may not be copied without the express written consent of PTC. This documentation may not be disclosed, transferred, modified, or reduced to any form, including electronic media, or transmitted or made publicly available by any means without the prior written consent of PTC and no authorization is granted to make copies for such purposes.

Information described herein is furnished for general information only, is subject to change without notice, and should not be construed as a warranty or commitment by PTC. PTC assumes no responsibility or liability for any errors or inaccuracies that may appear in this document.

The software described in this document is provided under written license agreement, contains valuable trade secrets and proprietary information, and is protected by the copyright laws of the United States and other countries. It may not be copied or distributed in any form or medium, disclosed to third parties, or used in any manner not provided for in the software licenses agreement except with written prior approval from PTC.

UNAUTHORIZED USE OF SOFTWARE OR ITS DOCUMENTATION CAN RESULT IN CIVIL DAMAGES AND CRIMINAL PROSECUTION. PTC regards software piracy as the crime it is, and we view offenders accordingly. We do not tolerate the piracy of PTC software products, and we pursue (both civilly and criminally) those who do so using all legal means available, including public and private surveillance resources. As part of these efforts, PTC uses data monitoring and scouring technologies to obtain and transmit data on users of illegal copies of our software. This data collection is not performed on users of legally licensed software from PTC and its authorized distributors. If you are using an illegal copy of our software and do not consent to the collection and transmission of such data (including to the United States), cease using the illegal version, and contact PTC to obtain a legally licensed copy.

Important Copyright, Trademark, Patent, and Licensing Information: See the About Box, or copyright notice, of your PTC software.

#### UNITED STATES GOVERNMENT RESTRICTED RIGHTS LEGEND

This document and the software described herein are Commercial Computer Documentation and Software, pursuant to FAR 12.212(a)-(b) (OCT'95) or DFARS 227.7202-1(a) and 227.7202-3(a) (JUN'95), and are provided to the US Government under a limited commercial license only. For procurements predating the above clauses, use, duplication, or disclosure by the Government is subject to the restrictions set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software Clause at DFARS 252.227-7013 (OCT'88) or Commercial Computer Software-Restricted Rights at FAR 52.227-19(c)(1)-(2) (JUN'87), as applicable. 01012011

Parametric Technology Corporation, 140 Kendrick Street, Needham, MA 02494 USA

### Contents

Matl	hcad Prime 2.0 Keyboard Shortcuts	. 5
	Regions	. 6
	Plots	. 7
	Operators	. 7
	Greek Letters	12
	Constants	12
	Matrices and Tables	12
	Worksheet Calculation and Management	12
	Formatting	13
	General	13

1

## Mathcad Prime 2.0 Keyboard Shortcuts

Regions	
Plots	7
Operators	7
Greek Letters	
Constants	
Matrices and Tables	
Worksheet Calculation and Management	
Formatting	
General	

### Regions

Operator/Command	Description	Keyboard Shortcut
Excel Component	Adds an excel	Ctrl+Shift+E
	component.	
Image	Inserts an image	Ctrl+4
Insert string	Inserts a string	"
	Moves the cursor to	Home
	the beginning of the	
	expression	
	Moves the cursor	End
	to the end of the	
	expression	
	Moves the cursor to	Ctrl+Left Arrow
	the left of the selected	
	expression or to the	
	beginning of the	
	selected word	
	Moves the cursor	Ctrl+Right Arrow
	to the right of the	
	selected expression	
	or to the end of the	
	selected word	
	Moves the cursor to	Right Arrow
	the next placeholder	
	Moves the cursor	Left Arrow
	to the previous	
	placeholder	
Math	Inserts a math region	Ctrl+Shift+M
Solve Block	Adds a solve block	Ctrl+1
	Separate regions	Ctrl+F8
	horizontally	
	Separate regions	Ctrl+F3
	vertically	
Text Block	Adds a text block	Ctrl+Shift+T
Text Box	Adds a text box	Ctrl+T

### **Plots**

Operator/Command	Description	Keyboard Shortcut
Add Trace	Adds a trace to a plot	Shift+Enter
Insert 3D Plot	Inserts a 3D Plot	Ctrl+3
Insert Contour Plot	Inserts a Contour Plot	Ctrl+5
Insert Polar Plot	Inserts a Polar Plot	Ctrl+7
Insert XY Plot	Inserts an XY Plot	Ctrl+2

### **Operators**

#### **Algebra Operators**

<b>Operator/Command</b>	Description	Keyboard Shortcut
x	Absolute Value	
x + y	Addition	+
x	Determinant	
$\frac{x}{y}$	Division	/
$y^x$	Exponentiation	٨
<i>n!</i>	Factorial	!
$x \div y$	In-line Division	Ctrl+/
(x)	Matched pair of parentheses	(
$x \cdot y$	Multiplication and	*
	Dot Product	
x - y	Negation and	-
	Subtraction	

Operator/Command	Description	Keyboard Shortcut
,	Separate arguments of a function	, Comma
$\sqrt[n]{x}$	Square Root and Nth Root	\
x%	Percent	%

#### **Calculus Operators**

<b>Operator/Command</b>	Description	Keyboard Shortcut
$A \circledast B$	Circular Convolution	Ctrl+Shift+V
$\frac{d^{2}}{dt^{2}}f(t)$	Derivative	Ctrl+Shift+D
$\int_{a}^{b} f(x) dx$	Integral	Ctrl+Shift+I
A * B	Linear Convolution	Ctrl+Shift+L
g := f'	Prime	Ctrl+' (Apostrophe)
$\prod_{j=m}^n X$	Product	Ctrl+Shift+#
$\sum_{j=m}^n X$	Summation	Ctrl+Shift+\$

#### **Comparison Operators**

<b>Operator/Command</b>	Description	Keyboard Shortcut
x = y	Equal To	Ctrl+=
x > y	Greater Than	>

Operator/Command	Description	Keyboard Shortcut
$x \ge y$	Greater Than or Equal	>=
	То	Ctrl+0
$x \neq y$	Inequality	< >
$x \in y$	Is Element Of	Ctrl+F7
x < y	Less Than	<
$x \leq y$	Less Than or Equal	<=
	То	Ctrl+9
$x \oplus y$	Logical Exclusive OR	Ctrl+Shift+%
$x \wedge y$	Logical AND	Ctrl+Shift+&
$\neg x$	Logical NOT	Ctrl+Shift+!
$x \lor y$	Logical OR	Ctrl+Shift+@

### **Definition and Evaluation Operators**

<b>Operator/Command</b>	Description	Keyboard Shortcut
$x \coloneqq a$	Definition	:
		Colon
x = 1	Evaluation	=

#### **Engineering Operators**

<b>Operator/Command</b>	Description	Keyboard Shortcut
x	Complex Conjugate	Ctrl+_
$x^{\circ}$	Degree	0
		Hold down Alt and press
		0176
$x \cdot y$	Scaling	Ctrl+Shift+U
$x \angle y$	Polar	Ctrl+Shift+P

#### Symbolics

<b>Operator/Command</b>	Description	Keyboard Shortcut
$\rightarrow$	Symbolic Evaluation	Ctrl+. (period)
	Limit	Ctrl+L

#### **Vector and Matrix Operators**

<b>Operator/Command</b>	Description	Keyboard Shortcut
$u \times v$	Cross Product	Ctrl+8
x = 1	Local Definition	=
[=]	Matrix	[
		Ctrl+M
$M^{\langle j  angle}$	Matrix Column	Ctrl+Shift+C
$M_{i,j}$	Matrix Index	[
$M^{-1}$	Matrix Inverse	^ -1
$M^{\widehat{i}}$	Matrix Row	Ctrl+Shift+R
$M^{\mathrm{T}}$	Matrix Transpose	Ctrl+Shift+T
$\ M\ $	Norm	Ctrl+Shift+
x z	Range	
		Two periods
x,yz	Step Range	,
		Comma
$\overrightarrow{M}$	Vectorize	Ctrl+^

#### **Programming Operators**

<b>Operator/Command</b>	Description	Keyboard Shortcut
	Adds a new line to the program	Enter
also if $x$ $\  y$	Also If	Ctrl+Shift+?
break	Break	Ctrl+Shift+{
continue	Continue	Ctrl+Shift+:
else $\ y\ $	Else	Ctrl+Shift+}
else if $x$ $\ y$	Else If	Ctrl+;
for $x \in y$   z	For Loop	Ctrl+Shift+"
$ \begin{array}{c} \text{if } x \\ \  y \\ \end{array} $	If	}
$x \leftarrow y$	Local Assignment	{
$\operatorname{return} x$	Return	Ctrl+\
	Program	]
$ \begin{array}{c c} \text{try} \\                                    $	Try/On Error	Ctrl+[
$\begin{array}{c} \text{while } x \\ \  y \end{array} \end{vmatrix}$	While Loop	Ctrl+]
	Changes typed word to operator	Ctrl+J

### **Greek Letters**

<b>Operator/Command</b>	Description	Keyboard Shortcut
Greek letter	Adds a Greek letter	corresponding Latin letter,
		Ctrl+G

### Constants

<b>Operator/Command</b>	Description	Keyboard Shortcut
γ	Euler's constant/number	g, Ctrl+G
$\infty$	Infinity	Ctrl+Shift+Z
π	Pi	p, Ctrl+G

### **Matrices and Tables**

Operator/Command	Description	Keyboard Shortcut
Insert Column Left/Right	Inserts a column	Shift+Space
Insert Row Above/Below	Inserts a row	Shift+Enter
Insert table	Inserts a table	Ctrl+6

### **Worksheet Calculation and Management**

<b>Operator/Command</b>	Description	Keyboard Shortcut
Calculate Worksheet	Recalculates the worksheet	Ctrl+F5
Include Worksheet	Inserts variable and function definition from another worksheet	Ctrl+Shift+W

### Formatting

Operator/Command	Description	Keystroke
<i>i</i> or <i>j</i>	Indicates imaginary units	1i or 1j
Subscripts	Toggles the baseline of a text	Ctrl+-
Toggle Labels	Toggles the label type	Ctrl+Q

### General

<b>Operator/Command</b>	Description	Keystroke
Close worksheet		Ctrl+W
Functions, open dialog box	Opens the Functions	F2
	dialog box	
Insert a collapsible area	Inserts an area you can collapse or expand to toggle the display of your work	Ctrl+Shift+A
Insert Page Break		Ctrl+Enter
Select a region		Ctrl+Enter (the cursor is in an active region)
Open Help Center		F1
Delete selected regions		Ctrl+D