

#Var List (pound vars from the Mach4API):

Local #Vars:

#0 = NULL

#1 = VAR_A

#2 = VAR_B

#3 = VAR_C

#4 = VAR_I

#5 = VAR_J

#6 = VAR_K

#7 = VAR_D

#8 = VAR_E

#9 = VAR_F

#10 = VAR_G

//no idea its not G

#11 = VAR_H

#12 = VAR_L

#13 = VAR_M

#14 = VAR_N

#15 = VAR_O

#16 = VAR_P

#17 = VAR_Q

#18 = VAR_R

#19 = VAR_S

#20 = VAR_T

//tool number, current tool or next tool? Or?

#21 = VAR_U

#22 = VAR_V

#23 = VAR_W

#24 = VAR_X

#25 = VAR_Y

#26 = VAR_Z

#27 to #34 = local user vars

From Brian: All the VAR_'char' are used with G65 commands.. don't read in to deep

Global #Vars:

#100 to #199

Con't next page

System #Vars:

#1237 = CURRENT_TIP (Tool tip direction in Lathe mode for Tip Comp)

#2027 = FRO_ON_OFF (FRO On or Off)

#2028 = CUR_DIA_INDEX (Current Dia number (D))

#2029 = CUR_TOOL_NUMBER (Current tool number (T))

#2031 = CUR_SELECTED_TOOL (Current tool that is selected (Next T number))

#2032 = CUR_LENGTH_INDEX (Current Length number (H))

#2033 = CUR_TOOL_XLENGTH_REGISTER

#2034 = CUR_TOOLDIA_REGISTER (Register for the amount of tool dia offset)

#2035 = CUR_TOOL_ZLENGTH_REGISTER

#2036 = CUR_TOOL_YLENGTH_REGISTER

#2132 = CUR_SPINDLE_SPEED

#2133 = TRAVERSE_RATE (rate for traverse motions)

#2134 = FEEDRATE (feed rate in current units/min)

#2135 = ROTATION_X (X Rotation point for G68)

#2136 = ROTATION_Y (Y Rotation point for G68)

#2137 = ROTATION (the amount of rotation on G68)//should be: "ROTATION_Z" makes sense but still have to fill them yourself

#3000 = alarm (From Brian: Alarm Number and this has not been added)

#3001 = micro second clock timer (From Brian: Not used at this time)

#3002 = clock hour (From Brian: not used at this time)

#3005 = DEFAULT_UNITS (bit 2 = 0 Inch (val=0), bit 2 = 1 Metric (val = 4))

#3005 (From Brian: 200 == G20 210 == G21) always comes up as 200 on my display??

#3011 = Year,month,day (From Brian: NA)

#3012 = Hour,minute,second (From Brian: NA)

#3901 = Number of parts machined (From Brian: NA)

#3902 = Required number of parts (From Brian: NA)

#4001 = MOD_GROUP_1 (Group 1 active G-code for motion)

#4002 = MOD_GROUP_2 (Group 2 active plane, XY-, YZ-, or XZ-plane)

#4003 = MOD_GROUP_3 (Group 3 absolute or incremental)

#4004 = MOD_GROUP_4 (Group 4 Arc Center mode)

#4005 = MOD_GROUP_5 (Group 5 G_93 (inverse time) or G_94 units/min)

#4006 = MOD_GROUP_6 (Group 6 millimeters or inches)

#4007 = MOD_GROUP_7 (Group 7 current cutter compensation side)

#4008 = MOD_GROUP_8 (Group 8)

#4009 = MOD_GROUP_9 (Group 9)

#4010 = MOD_GROUP_10 (Group 10 for cycles, old_z or r_plane)

#4011 = MOD_GROUP_11 (Group 11 Polar mode)
#4012 = MOD_GROUP_12 (Group 12 active origin (1=G54 to 9=G59.3))
#4013 = MOD_GROUP_13 (From Brian: Group 13 Contouring mode G61, G64)
#4014 = MOD_GROUP_14 (From Brian: NA)
#4015 = MOD_GROUP_15 (From Brian: NA)
#4016 = MOD_GROUP_16 (From Brian: NA)
#4017 = MOD_GROUP_17 (From Brian: NA)
#4018 = MOD_GROUP_18 (From Brian: NA)
#4019 = MOD_GROUP_19 (From Brian: NA)
#4020 = MOD_GROUP_20 (From Brian: NA)
#4021 = MOD_GROUP_21 (From Brian: NA)
#4022 = MOD_GROUP_22 (From Brian: NA)

#4100 = ORIGIN_OFFSET_X
#4101 = ORIGIN_OFFSET_Y
#4102 = ORIGIN_OFFSET_Z //this one and below are same #var number???
#4102 = B code (From Brian: NA)
#4103 = ORIGIN_OFFSET_A
#4104 = ORIGIN_OFFSET_B
#4105 = ORIGIN_OFFSET_C

From Brian: May add them... I don't know

#4107 = D code
#4109 = F code
#4111 = H code
#4113 = M code
#4114 = Sequence number
#4115 = Program number
#4119 = S code
#4120 = T code
#4130 = P code

#5001 = LAST_OUTPUT_X
#5002 = LAST_OUTPUT_Y
#5003 = LAST_OUTPUT_Z
#5004 = LAST_OUTPUT_A
#5005 = LAST_OUTPUT_B
#5006 = LAST_OUTPUT_C

#5021 = CURRENT_X
#5022 = CURRENT_Y
#5023 = CURRENT_Z
#5024 = CURRENT_A
#5025 = CURRENT_B
#5026 = CURRENT_C

#5030 = AXIS_OFFSET_X (Used to save the offset with the G92.3 command)
#5031 = AXIS_OFFSET_Y
#5032 = AXIS_OFFSET_Z
#5033 = AXIS_OFFSET_A
#5034 = AXIS_OFFSET_B
#5035 = AXIS_OFFSET_C

#5050 = G92_OFFSET_X (Used to save the offset with the G92.3 command)
#5051 = G92_OFFSET_Y
#5052 = G92_OFFSET_Z
#5053 = G92_OFFSET_A
#5054 = G92_OFFSET_B
#5055 = G92_OFFSET_C

#5061 = PROBE_POS_X (G31 Skip signal)
#5062 = PROBE_POS_Y
#5063 = PROBE_POS_Z
#5064 = PROBE_POS_A
#5065 = PROBE_POS_B
#5066 = PROBE_POS_C

#5110 = HEAD_SHIFT_X
#5111 = HEAD_SHIFT_Y
#5112 = HEAD_SHIFT_Z
#5113 = HEAD_SHIFT_A
#5114 = HEAD_SHIFT_B
#5115 = HEAD_SHIFT_C

#5157 = CUR_COMP_X (program x, used when cutter comp on)
#5158 = CUR_COMP_Y (program y, used when cutter comp on)
#5159 = CUR_COMP_Z (program z, used when cutter comp on)
#5181 = G_30_XPOS
#5182 = G_30_YPOS
#5183 = G_30_ZPOS
#5184 = G_30_APOS
#5185 = G_30_BPOS
#5186 = G_30_CPOS

#5201 = WORK_SHIFT_X
#5202 = WORK_SHIFT_Y
#5203 = WORK_SHIFT_Z
#5204 = WORK_SHIFT_A
#5205 = WORK_SHIFT_B
#5206 = WORK_SHIFT_C

#5221 = FIXTURES_START (Fixture start in Parameter list)

#5301 = G_30_P2_XPOS

#5302 = G_30_P2_YPOS

#5303 = G_30_P2_ZPOS

#5304 = G_30_P2_APOS

#5305 = G_30_P2_BPOS

#5306 = G_30_P2_CPOS

#5311 = G_30_P3_XPOS

#5312 = G_30_P3_YPOS

#5313 = G_30_P3_ZPOS

#5314 = G_30_P3_APOS

#5315 = G_30_P3_BPOS

#5316 = G_30_P3_CPOS

#5321 = G_30_P4_XPOS

#5322 = G_30_P4_YPOS

#5323 = G_30_P4_ZPOS

#5324 = G_30_P4_APOS

#5325 = G_30_P4_BPOS

#5326 = G_30_P4_CPOS

#5410 = ROTATION_G68_NO_R

#5440 = APPROACH_DIST_X (Approach distance for the G60 Unidirectional approach command)

#5441 = APPROACH_DIST_Y

#5442 = APPROACH_DIST_Z

#5443 = APPROACH_DIST_A

#5444 = APPROACH_DIST_B

#5445 = APPROACH_DIST_C

“Beta” list by: Poppa Bear, and Ya-Nvr-No, and Brian Barker

PLEASE add to, or correct, or clarify if you find others, or different....