

**CPU09MM3 - GAL Selection Table.**

Type	I/O	G1	G2	G3	Programmer
GAL16V8A-15LP	2	x	x	x	1, 2, 3, 4
GAL16V8B-15LP	1	x	x	x	1, 2, 3, 4
GAL16V8D-15LP	1	x	x	x	1, 2, 3, 4
GAL16V8D-25LP	1	x	x	x	1, 2, 3, 4
GAL22V10B-15LP	3	CPU_1	CPU_2	CPU_3	1, 2, 3, 4
GAL22V10D-15LP	3	CPU_1	CPU_2	CPU_3	1, 2, 3, 4
ATF16V8B-15PC	1	x	x	x	2, 3, 1, 4
ATF16V8B-25PC	1	x	x	x	2, 3, 1, 4
ATF16V8BQL-15PC	1	x	x	x	2, 3, 1, 4
ATF22V10B-15PC	1	ATF-CPU_1	ATF-CPU_2	ATF-CPU_3	2, 3, 1, 4
ATF22V10C-15PC	5	ATF-CPU_1	ATF-CPU_2	ATF-CPU_3	2, 3, 1, 4
ATF22V10CQZ-20PC	5	ATF-CPU_1	ATF-CPU_2	ATF-CPU_3	2, 3, 1, 4
PALCE16V8-15PC	1	x	x	x	2, 3, 4
PALCE16V8-25PC	1	x	x	x	2, 4, 3
PALCE16V8H-15PC/4	4	x	x	x	2, 3, 4
PALCE16V8H-25PC	4	x	x	x	2, 4, 3
PALCE16V8Q-15PC/4	4	x	x	x	2, 3, 4
PALCE22V10H-15PC/4	4	CPU_1	CPU_2	CPU_3	2, 3, 4
PALCE22V10H-25PC/4	4	CPU_1	CPU_2	CPU_3	2
PALCE22V10Q-25PC	4	CPU_1	CPU_2	CPU_3	2

Tested

Any open field means not used/tested

First nr preferred

Also tested a mix ATF / GAL / PALCE and -15 / -25

I/O: 1 = I/O 50K pull up 2 = I/O No pull up 3 = I/O Active pull up 4 = 100K 50K No pull up 5 = I/O Pin keeper	Programmer: 1 = Xgpro TL866II Plus, Sw 12.90 - Fw 04.2.132 2 = GALEP-4, Galep32 Version 1.20.4 3 = TOP2013, Sw Topall 8.92 - Fw 6.30 4 = TOP3002, Sw Topall 9.21 - Fw 6.93 5 = TOP3100, Sw Topall 8.92 - Fw 6.02
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Remarks: I/O type 4 depending on device suffix /4 = 100K, /5 = 50K, otherwise NO pull-up  
I/O type 2,4 and 5 may need a pull-up on floating input pins.  
Some ATF16V8B had errors on the TL866II Plus but not on the GALEP-4.  
Do select the full name in the programmer A, B, C, D, H, Q, or CQZ, BQL version !  
Otherwise you will get programming errors !  
TOP family also select the correct speed -15 or -25 and /4 or /5 ! Check Position Tab !

Also read 'Documents\PLD and Programmers Info.pdf'.