

## CPU09IOP - GAL Selection Table.

Type	I/O	G1	G2		Programmer
GAL16V8A-15LP	2	IOP_1	x		1, 2, 3, 4
GAL16V8B-15LP	1	IOP_1	x		1, 2, 3, 4
GAL16V8D-15LP	1	IOP_1	x		1, 2, 3, 4
GAL16V8D-25LP	1	IOP_1	x		1, 2, 3, 4
GAL22V10B-15LP	3	x	IOP_2		1, 2, 3, 4
GAL22V10D-15LP	3	x	IOP_2		1, 2, 3, 4
ATF16V8B-15PC	1	ATF-IOP_1	x		2, 3, 1, 4
ATF16V8B-25PC	1	ATF-IOP_1	x		2, 3, 1, 4
ATF16V8BQL-15PC	1	ATF-IOP_1	x		2, 3, 1, 4
ATF22V10B-15PC	1	x	ATF-IOP_2		2, 3, 1, 4
ATF22V10C-15PC	5	x	ATF-IOP_2		2, 3, 1, 4
ATF22V10CQZ-20PC	5	x	ATF-IOP_2		2, 3, 1, 4
PALCE16V8-15PC	1	IOP_1	x		2, 3, 4
PALCE16V8-25PC	1	IOP_1	x		2, 4, 3
PALCE16V8H-15PC/4	4	IOP_1	x		2, 3, 4
PALCE16V8H-25PC	4	IOP_1	x		2, 4, 3
PALCE16V8Q-15PC/4	4	IOP_1	x		2, 3, 4
PALCE22V10H-15PC/4	4	x	IOP_2		2, 3, 4
PALCE22V10H-25PC/4	4	x	IOP_2		2
PALCE22V10Q-25PC	4	x	IOP_2		2

Tested

Any open field means not used/tested

First nr preferred

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

<b>I/O:</b> 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	<b>Programmer:</b> 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
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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 or Q version !  
 Otherwise you will get programming errors !  
 TOP2013, TOP3000 also select the correct speed -10, -15 or -25 !