

Vendor	COLOGNE CHIP			ALTERA				
Series	GateMate			Max 10			Cyclone 10	
Product	CCGM1A1	CCGM1A2	CCGM1A4	10M04	10M08	10M16	10CL016	10CL025
Lut type	8input LUT-tree	8input LUT-tree	8input LUT-tree	LUT6	LUT6	LUT6	LUT6	LUT6
Node	28nm	28nm	28nm	55 nm	55 nm	55 nm	28nm	28nm
Logic Elements	20k	40k	81k	4k	8k	16k	16K	25k
Register	40k	81k	163k	4k	8k	56k	56k	66k
Block RAM Bits	1,310k	2,621k	5,242k	189k	378k	549k	504k	594k
PLLs	4	8	16	2	2	4	4	4
SerDes	1	2	4	4	-	-	-	-
Multipliers	Arbitrary	Arbitrary	Arbitrary	20	24	45	56	66
Core Voltage	0.9V-1.1V	0.9V-1.1V	0.9V-1.1V	1.15V-1.25V	1.15V-1.25V	1.15V-1.25V	1.2V	1.2V
User GPIO (Single added/LVDS)	162/81	162/81	154/77	160	250	300	340	150
Package	15x15 mm	15x15 mm	15x15 mm	23x23 mm	23x23 mm	23x23 mm	23x23 mm	17x17 mm
Price	€10	€20	€40	\$16.13	\$44.99	\$48.17	\$23.83	\$28.91

Vendor	COLOGNE CHIP			MICRO CHIP				
Series	GateMate			PolarFire	IGLOO		IGLOO-2	
Product	CCGM1A1	CCGM1A2	CCGM1A4	MPF050T	AGL125	AGL250	M2GL025	M2GL050
Lut type	8input LUT-tree	8input LUT-tree	8input LUT-tree	LUT4	LUT4	LUT4	LUT4	LUT4
Node	28nm	28nm	28nm	28 nm	130 nm	130 nm	65nm	65nm
Logic Elements	20k	40k	81k	48k	3k	8k	27k	50k
Register	40k	81k	163k	48k	8k	8k	15k	15k
Block RAM Bits	1,310k	2,621k	5,242k	3,800K	36k	36k	1,104k	1,826k
PLLs	4	8	16	4	1	1	2	6
SerDes	1	2	4	1	-	-	4	8
Multipliers	Arbitrary	Arbitrary	Arbitrary	84	-	-	34	72
Core Voltage	0.9V-1.1V	0.9V-1.1V	0.9V-1.1V	1.0V	1.2V-1.5V	1.2V-1.5V	1.14V-2.625V	1.14V-2.625V
User GPIO (Single added/LVDS)	162/81	162/81	154/77	196	250	143	267	377
Package	15x15 mm	15x15 mm	15x15 mm	19x19 mm	13x13 mm	13x13 mm	19×19 mm	19x19 mm
Price	€10	€20	€40	\$110.68	\$17.8	\$35.89	\$73.87	\$119.81

Vendor	COLOGNE CHIP			LATTICE				
Series	GateMate			MachX02	MachX03		ECP5	
Product	CCGM1A1	CCGM1A2	CCGM1A4	XO2-7000	XO3LF-6900	XO3LF-9400	LFE5U-25F	LFE5U-45F
Lut type	8input LUT-tree	8input LUT-tree	8input LUT-tree	LUT4	LUT4	LUT4	LUT4	LUT4
Node	28nm	28nm	28nm	28 nm	40 nm	40 nm	40 nm	40 nm
Logic Elements	20k	40k	81k	6864	6900	9 400	24K	44K
Register	40k	81k	163k	6864	6900	9400	48K	88K
Block RAM Bits	1,310k	2,621k	5,242k	256k	432k	240k	1,100K	1,800K
PLLs	4	8	16	2	2	2	2	4
SerDes	1	2	4	-	-	-	-	-
Multipliers	Arbitrary	Arbitrary	Arbitrary	-	-	-	56	92
Core Voltage	0.9V-1.1V	0.9V-1.1V	0.9V-1.1V	2.375V-3.465V	2.375V-3.465V	2.375V-3.465V	1.2V	1.2V
User GPIO (Single added/LVDS)	162/81	162/81	154/77	114	206	206	197	197
Package	15x15 mm	15x15 mm	15x15 mm	20x20 mm	14x14 mm	14x14 mm	14x14 mm	14x14 mm
Price	€10	€20	€40	\$24.65	\$24.50	\$24.55	\$25.05	\$37.15