

## Resource Utilization and Performance

Synthesis results for Actel device is tabulated below

IP	FAMILY	Device	Fmax (MHz)	Cores	RAM/FIFO	IOB	GCLK	Design Tool
x86 Processor	ProASIC3E	A3PE1500	23.455	29406	0	213	6	Actel Libero IDE v8.0

This includes the following cores

1. CPU core
2. 8254 equivalent timer
3. 8259 equivalent interrupt controller
4. 8237 equivalent DMA controller
5. 8251 equivalent serial controller

Device utilization summary for individual cores is listed below.

IP	FAMILY	Device	CORES	RAM/FIFO	IOB	GCLK	Design Tool
CPU	PROASIC3E	A3PE1500	19156	0	157	6	Actel Libero IDE v8.0
DMA	PROASIC3E	A3PE1500	6077	0	129	6	Actel Libero IDE v8.0
ICU	PROASIC3E	A3PE1500	894	0	43	3	Actel Libero IDE v8.0
SCU	PROASIC3E	A3PE1500	431	0	33	2	Actel Libero IDE v8.0
TCU	PROASIC3E	A3PE1500	1071	0	33	2	Actel Libero IDE v8.0

**Note :**

CPU - Central Processing Unit

ICU - Interrupt Control Unit

TCU - Timer / Counter Unit

SCU - Serial Communications Unit

DMA – Direct Memory Access