




## Introducing T4xx1: Low power variant

- T4081, T4161, T4241 are 11% to 21% lower power
- Extended temp on all speeds
- T4081 offered at 1.8GHz
- Software and hardware compatible with T4. No board changes, no voltage changes.
- No requirement to migrate from T4xx0 to T4xx1. Both have the same longevity statements.
- Documented in [Rev 1 Hardware Specification](#)
- Orderable now

	Device	Fmax	Thermal at Fmax	Ext temp offerings
	T4080	1.67GHz	35.6W	1.5GHz
	T4081	1.8GHz	28.6W	1.5, 1.67, 1.8GHz
	T4160	1.8GHz	45.0W	1.5GHz
	T4161	1.8GHz	36.2W	1.5, 1.67, 1.8GHz
	T4240	1.8GHz	54.0W	1.5GHz
	T4241	1.8GHz	45.1W	1.5, 1.67, 1.8GHz

## T4xx0 and T4xx1 Power Comparison

	T4xx0 Thermal Power (AltiVec disabled)	T4xx1 Thermal Power (AltiVec disabled)	Reduction
<b>8 threads</b>	<b>T4080</b>	<b>T4081</b>	
1500MHz	28.6	24.0	16%
1667MHz	35.6	28.1	21%
1800MHz	NA	28.6	NA
<b>16 threads</b>	<b>T4160</b>	<b>T4161</b>	
1500MHz	35.1	30.3	14%
1667MHz	43.5	35.3	19%
1800MHz	45.0	36.2	20%
<b>24threads</b>	<b>T4240</b>	<b>T4241</b>	
1500MHz	42.0	37.5	11%
1667MHz	52.0	43.7	16%
1800MHz	54.0	45.1	16%

## T4xx1 Part Numbers

Production Part # (orderable)	Description (Freq_Core/Freq_Platform/Freq_DDR (MT/s))
T4241NSE7PQB	Low power, 0 – 105C, Encryption enabled,1500/667/1600, Rev 2.0
T4241NSE7QTB	Low power, 0 – 105C, Encryption enabled,1667/733/1866, Rev 2.0
T4241NSE7TTB	Low power, 0 – 105C, Encryption enabled,1800/733/1866, Rev 2.0
T4241NSN7PQB	Low power, 0 – 105C, Encryption disabled,1500/667/1600, Rev 2.0
T4241NSN7QTB	Low power, 0 – 105C, Encryption disabled,1667/733/1866, Rev 2.0
T4241NSN7TTB	Low power, 0 – 105C, Encryption disabled,1800/733/1866, Rev 2.0
T4241NXE7PQB	Low power, -40 – 105C, Encryption enabled,1500/667/1600, Rev 2.0
T4241NXE7QTB	Low power, -40 – 105C, Encryption enabled,1667/733/1866, Rev 2.0
T4241NXE7TTB	Low power, -40 – 105C, Encryption enabled,1800/733/1866, Rev 2.0
T4241NXN7PQB	Low power, -40 – 105C, Encryption disabled,1500/667/1600, Rev 2.0
T4241NXN7QTB	Low power, -40 – 105C, Encryption disabled,1667/733/1866, Rev 2.0
T4241NXN7TTB	Low power, -40 – 105C, Encryption disabled,1800/733/1866, Rev 2.0
T4161NSE7PQB	Low power, 0 – 105C, Encryption enabled,1500/667/1600, Rev 2.0
T4161NSE7QTB	Low power, 0 – 105C, Encryption enabled,1667/733/1866, Rev 2.0
T4161NSE7TTB	Low power, 0 – 105C, Encryption enabled,1800/733/1866, Rev 2.0
T4161NSN7PQB	Low power, 0 – 105C, Encryption disabled,1500/667/1600, Rev 2.0
T4161NSN7QTB	Low power, 0 – 105C, Encryption disabled,1667/733/1866, Rev 2.0
T4161NSN7TTB	Low power, 0 – 105C, Encryption disabled,1800/733/1866, Rev 2.0
T4161NXE7PQB	Low power, -40 – 105C, Encryption enabled,1500/667/1600, Rev 2.0
T4161NXE7QTB	Low power, -40 – 105C, Encryption enabled,1667/733/1866, Rev 2.0
T4161NXE7TTB	Low power, -40 – 105C, Encryption enabled,1800/733/1866, Rev 2.0
T4161NXN7PQB	Low power, -40 – 105C, Encryption disabled,1500/667/1600, Rev 2.0
T4161NXN7QTB	Low power, -40 – 105C, Encryption disabled,1667/733/1866, Rev 2.0
T4161NXN7TTB	Low power, -40 – 105C, Encryption disabled,1800/733/1866, Rev 2.0
T4081NSE7PQB	Low power, 0 – 105C, Encryption enabled,1500/667/1600, Rev 2.0
T4081NSE7QTB	Low power, 0 – 105C, Encryption enabled,1667/733/1866, Rev 2.0
T4081NSE7TTB	Low power, 0 – 105C, Encryption enabled,1800/733/1866, Rev 2.0
T4081NSN7PQB	Low power, 0 – 105C, Encryption disabled,1500/667/1600, Rev 2.0
T4081NSN7QTB	Low power, 0 – 105C, Encryption disabled,1667/733/1866, Rev 2.0
T4081NSN7TTB	Low power, 0 – 105C, Encryption disabled,1800/733/1866, Rev 2.0
T4081NXE7PQB	Low power, -40 – 105C, Encryption enabled,1500/667/1600, Rev 2.0
T4081NXE7QTB	Low power, -40 – 105C, Encryption enabled,1667/733/1866, Rev 2.0
T4081NXE7TTB	Low power, -40 – 105C, Encryption enabled,1800/733/1866, Rev 2.0
T4081NXN7PQB	Low power, -40 – 105C, Encryption disabled,1500/667/1600, Rev 2.0
T4081NXN7QTB	Low power, -40 – 105C, Encryption disabled,1667/733/1866, Rev 2.0
T4081NXN7TTB	Low power, -40 – 105C, Encryption disabled,1800/733/1866, Rev 2.0

