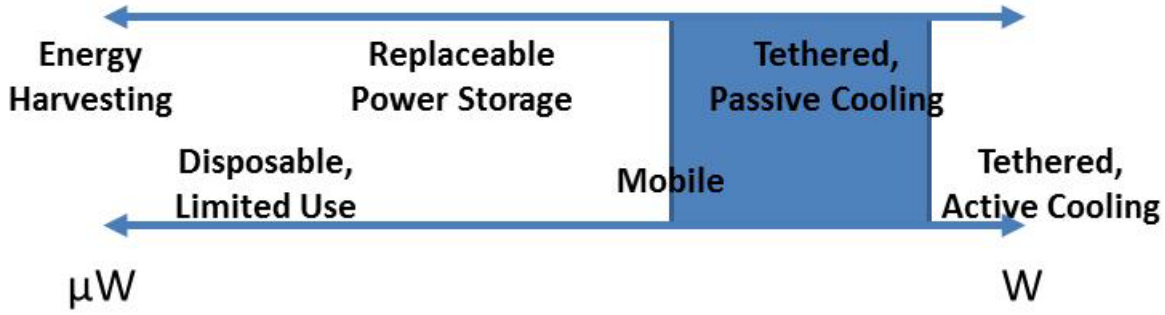
Low Power Optimization Datasheet for

VIA Technologies

Eden, C7, Nano, Nano X2, and multicore processors

1. These processors target the shaded portion of the low power spectrum.



2. Operating voltages:

VIA Eden: 0.684 V to 0.796 V

VIA C7: 0.956 V to 1.004 V

VIA Nano, VIA Nano X2, and VIA multicore are Flex VID

3. Typical power at maximum operating frequency and (TDP) Thermal Design Power

VIA C7: up to 2.0GHz with 20W TDP

VIA Eden: up to 1.6GHz with 8W TDP

VIA Nano U3400: up to 800MHz with 3.5W TDP

VIA Nano U3500: up to 1.0 GHz with 5W TDP

VIA Nano U3300: up to 1.2 GHz with 6.8W TDP

VIA Nano U3100: 1.3+ GHz with 9+W TDP

VIA Nano L3050: 1.8 GHz with 20W TDP

VIA Nano X2: 1.2 and 1.6GHz

VIA Eden X2: 800 MHz

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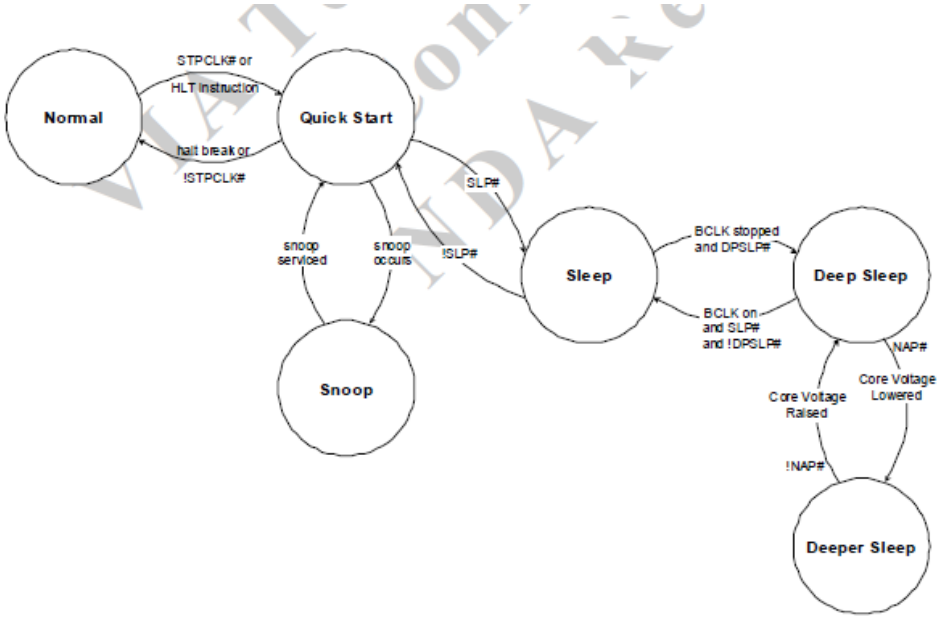
4. These processors include support for clock gating. No granularity information is available.

5. The VIA Nano and Nano X2 processor family support five (5) sleep states as shown below:



6. These processors do not support multiple supply voltages.

7. These processors use FlexVID to support both frequency and voltage scaling.

8. The included hardware accelerator on these processors is an Advanced Cryptography Engine.

9. These processors support multithreading.

10. These processors include a multicore configuration.

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11. To find out more information for:

    A. Making your code faster - check the documentation for standard x86 compiler tools.

    B. Using the hardware accelerator - the VIA Padlock cryptographic instruction programming manual is available at http://www.via.com.tw/en/initiatives/padlock/

    C. Sleep and idle modes – VIA processors are ACPI compliant. The spec is available at http://www.acpi.info/spec.htm

    D. Optimize the locality of memory – most x86 operating systems efficiently manage this.

    E. Using buffers and pre-allocated resources - most x86 operating systems efficiently manage this.

    F. Optimize data movement - most x86 operating systems efficiently manage this.

    G. Optimize interrupt handling - most x86 operating systems efficiently manage this.

    H. Manage multi-threading - most x86 operating systems efficiently manage this.