

# GreenPAK 開発方法

- ユーザーによるデザイン
  - 開発環境を無償提供



- Dialogによるデザインチェック

- Dialogでのデザインサポート

- 回路図またはタイミングチャート
- 状態遷移図
- ピン配置
- 動作電源電圧、温度範囲
- 動作、待機消費電流

- 個別型番を割り当てデータシート発行

SLG46880/81

GreenPAK Programmable Mixed Signal Matrix with Asynchronous State Machine and Dual Supply



#### General Description

The GPAK product family is based around Dialog Semiconductor's proprietary Zero Static Power ASM (Asynchronous State Machine). This machine is fault tolerant and operates continuously over a wide voltage range with very low latency. The SLG46880/81 provides a small, low power component for commonly used mixed-signal functions. The user creates their circuit design by programming the one-time Non-Volatile Memory (NVM) to configure the interconnect logic, the IO Pins and the macrocells of the SLG46880/81. This highly versatile device allows a wide variety of mixed-signal functions to be designed within a very small, low power single integrated circuit.

#### Key Features

- Two High Speed General Purpose Rail-to-Rail Analog Comparators (ACMPxH)
- Two Low Power General Purpose Rail-to-Rail Analog Comparators (ACMPxL)
- Two Voltage References
  - Two Vref Outputs
- Twelve Combination Function Macrocells
  - One Selectable DFF/Latch or 2-bit LUT
  - Four Selectable DFF/Latches or 3-bit LUTs
  - One Selectable Pipe Delay or Ripple Counter or 3-bit LUT
  - One Selectable Programmable Pattern Generator or 2-bit LUT
  - Four Selectable 8-bit CNT/DLYs or 3-bit LUTs
  - One Selectable 16-bit CNT/DLY or 4-bit LUT

- Asynchronous State Machine
  - Twelve States
  - Four Dynamic Memory Macrocells
  - R(1) Computation Macrocell with dedicated ACMP
- Serial Communications
  - PC Protocol Interface
  - Programmable Delay with Edge Detector Output
  - Debounce Filter or Edge Detector
- Three Oscillators
  - 2.048 kHz Oscillator
  - 0.048 MHz Oscillator
  - 25 MHz Oscillator
- Crystal Oscillator
- Analog Temperature Sensor
- Power-On Reset
- Wide Range Power Supply
  - 2.5 V (±8%) to 5 V (±10%) Vcc
  - 2.5 V (±8%) to 5 V (±10%) Vcc (Vcc2 ≤ Vcc) for SLG46880
  - 1 V (±5%) to 1.8 V (±10%) Vcc2 for SLG46881
- Operating Temperature Range: -40°C to 85°C
- RoHS Compliant / Halogen-Free
- 32-pin STQFN: 4 mm x 4 mm x 0.55 mm, 0.4 mm pitch

- デザインファイル作成

