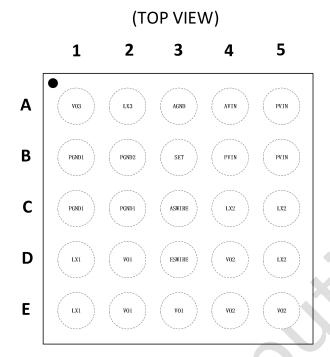
## **EPC9905 Product Brief**

EPC9905 is designed for powering AMOLED displays which requires ELVDD, ELVSS and AVDD, which integrates two boost converters, VO1 for ELVDD and VO3 for AVDD, and an inverting buck-boost converter VO2 for ELVSS. Output voltages of the ELVDD is fixed at 4.6V. Output voltages of the ELVSS and AVDD can be programmed in digital steps through the digital interface control pin (ASWIRE/ESWIRE).

EPC9905 is available in WLCSP-2.07×2.07-25B packaging. EPC9905 has a fully protection function: SCP, OLP, OTP and so on.

## **Features**

- Supply Voltage Range: 2.9V to 5V
- Synchronous Boost Converter (ELVDD)
  - Fixed 4.6V Output Voltage
  - 0.8% Accuracy at 4.6V
  - The Output Current Capability is up to 650mA
- Inverting Buck-Boost Converter (ELVSS)
  - 6.6V to -1.0V Output Voltage with 100mV Step
  - 4V Default Output Voltage
  - The Output Current Capability is up to 650mA
- Synchronous Boost Converter (AVDD)
  - 7.1V to 7.8V Output Voltage with 100mV Step or 6.9V to 7.9V Output Voltage with 50mV Step
  - 7.6V Default Output Voltage
  - 0.5% Accuracy at 7.6V
  - 150mA Output Current Capability
- Dual SWIRE interface
  - ASWIRE Pin for AVDD Enable and Control
  - ESWIRE Pin for ELVDD/ELVSS Enable and Control
- Protection
  - VIN and VOUT Bi-Directional Isolation
  - Short Circuit Protection (SCP)
  - Overload Protection (OLP)
  - Short Circuit and OLP Detection Time: 0.83ms
  - Thermal Shutdown
- SET Pin for Regs Table Choice
- ELVSS Start-Up Delay: 10ms
- Packaging: WLCSP-25B-2.07mm x 2.07mm



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