

## 产品简介

# 连续导通模式的功率因数校正 IC

## 高效、低系统成本的 CCM-PFC IC

ICE2PCS0xG 是采用 BiCMOS 技术的第二代连续导通模式 (CCM) PFC 控制器。与上一代芯片相比,新一代芯片的内部基准电压更低(在 3V 下微调)。此外,新一代芯片还具有其他优势,例如更宽的  $V_{CC}$  工作范围、优化的内部振荡器和额外的直流大容量电容器过压保护。

ICE3PCS01G 是用于有源 CCM 功率因数校正转换器的 14 引脚、宽输入电压范围 (85-265  $V_{AC}$ ) 的控制器 IC。与第二代 ICE2PCS0xG 相比,第三代 PFC IC 具有在 2.5V 下微调的最低内部基准电压和集成数字控制电压回路。PFC 芯片的其他优势还包括:0.2 V 低峰值电流限制,21 kHz—100 kHz 可调栅极开关频率范围以及 50 kHz—100 kHz 外部频率范围实现同步。在所有的输入电压范围内,ICE3PCS01G 能够在满载时达到 95% 的效率。

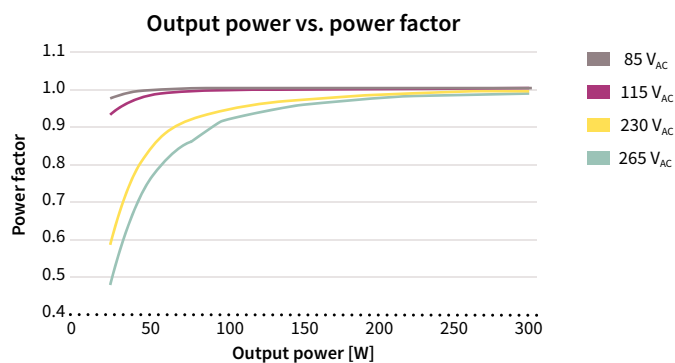
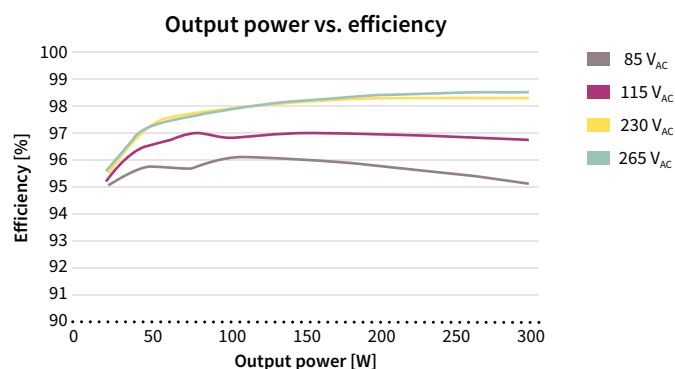
### 关键性能

#### 第二代 CCM PFC IC

- › 满足 IEC 1000-3-2 标准的 D 级规范
- › 外部组件数量极少
- › 开关频率可调节和固定
- › 频率范围 20 至 250 kHz
- › 提供掉电保护版本
- › 支持宽输入电压范围
- › 负载跳跃期间动态响应增强
- › 逐周期峰值电流限制
- › 集成过压保护、过流保护
- › DSO-8 封装
- › 无铅,符合 RoHS 标准

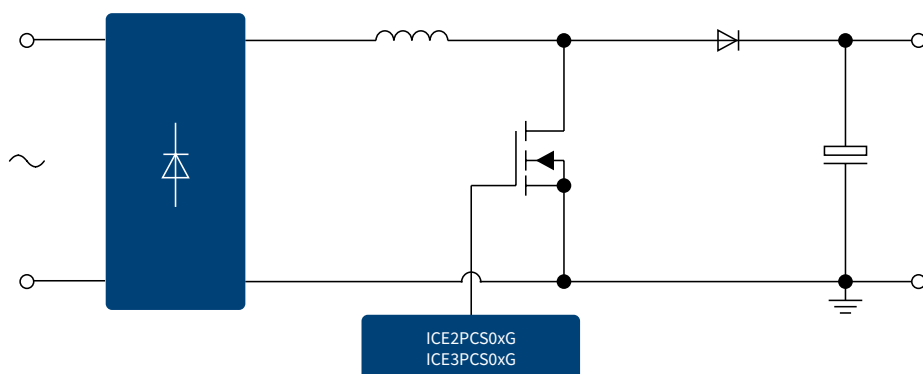
#### 第三代 CCM PFC IC

- › 满足 IEC 1000-3-2 标准的 D 级规范
- › 集成数字电压回路补偿
- › 升压跟随功能
- › 大容量电压监测信号,掉电保护
- › 多重保护方案,例如双级过压保护
- › 负载跳跃期间快速输出动态响应
- › 外部同步
- › 超低峰值电流限制阈值
- › DSO-8 和 DSO-14 封装



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## 第二代 CCM PFC IC

产品型号	开关频率 $f_{sw}$	驱动电流	封装
ICE2PCS01G	50-250 kHz	2.0 A	DSO-8
ICE2PCS02G	65 kHz		
ICE2PCS03G	100 kHz		
ICE2PCS05G	20-250 kHz		

## 第三代 CCM PFC IC

产品型号	开关频率 $f_{sw}$	驱动电流	封装
ICE3PCS01G	可调	0.75 A	DSO-14
ICE3PCS02G			DSO-8
ICE3PCS03G			DSO-8

PFC CCM IC特性	ICE2PCS01G ICE2PCS05G	ICE2PCS02G ICE2PCS03G	ICE3PCS03G	ICE3PCS02G	ICE3PCS01G
数字控制电压回路	-	-	✓	✓	✓
变频	✓	-	✓	✓	✓
同步频率	-	✓	✓	✓	-
开环保护	✓	✓	✓	✓	✓
低峰值电流限制	-1 V	-1 V	-0.4 V	-0.4 V	-0.2 V
掉电保护	-	✓	✓	-	✓
过电压保护	✓	✓	✓	✓	✓
次级过压保护	-	✓	✓	-	-
PFC 启用功能	-	-	-	-	✓
升压跟随模式	-	-	-	-	✓
5 V 调节器	-	-	-	-	✓

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