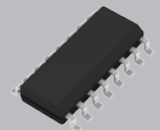


Interleaved PFC for high-power applications

The FA1C20N critical mode interleaved PFC*1 control IC works in combination with FA6C60N series LLC current resonance control ICs to improve efficiency under light loads and lower standby power by utilizing burst operation control. It smoothly switches between burst, single, and interleaved operation depending on PFC output power to achieve a high power factor. Fuji Electric's proprietary control technology reduces the number of system components by eliminating the need for AC input voltage detection resistors and phase compensation circuits. *1 PFC: Power Factor Correction

- Low standby power : Achieves an input power of 300 mW or less at 150 mW output across an input range of 90 to 264 V AC.
- High power factor : Delivers a power factor of 95% or more at 230 V AC input and 50% load.
- Operation mode switching : Fuji Electric's proprietary technology enables smooth mode switching and adjustable switching points.
- Fewer power supply parts : No input voltage detection resistor or phase compensation circuit necessary.

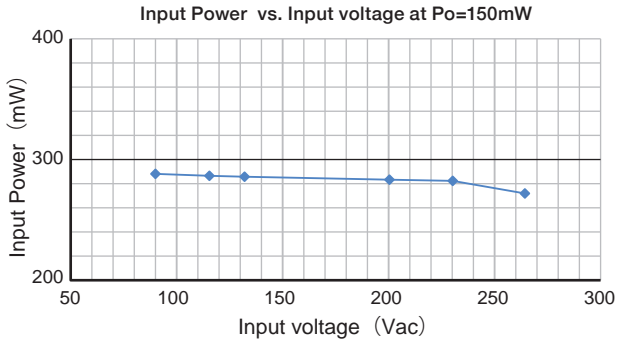


Package: SOP-16

Example applications:
Large TVs/monitors, industrial power supplies,
power supplies for high-end PCs

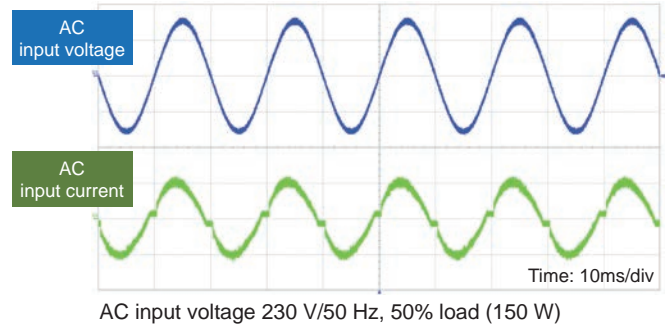
1. Low standby power

When used in combination with our FA6C60N series LLC control ICs, it can achieve an input power of 300 mW or less at an output power of 150 mW.



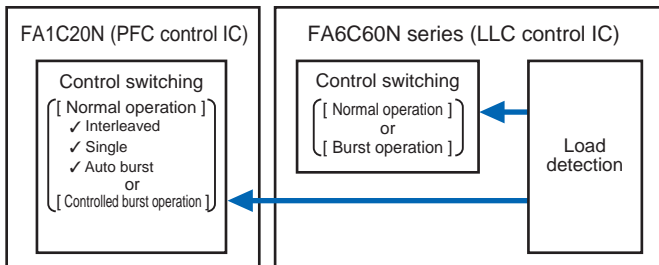
2. High power factor

Fuji Electric's proprietary control technology can achieve a high power factor even at high input voltages.



3. Operation mode switching

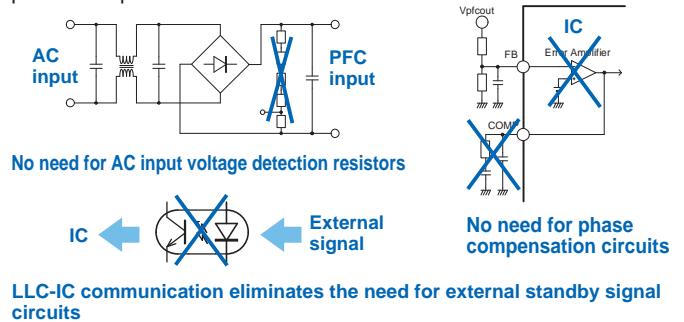
The FA6C60N series LLC control IC performs load detection and at light loads, both the PFC control IC and LLC control IC switch from normal operation to burst operation.



*The load power for operation mode switching is adjustable.

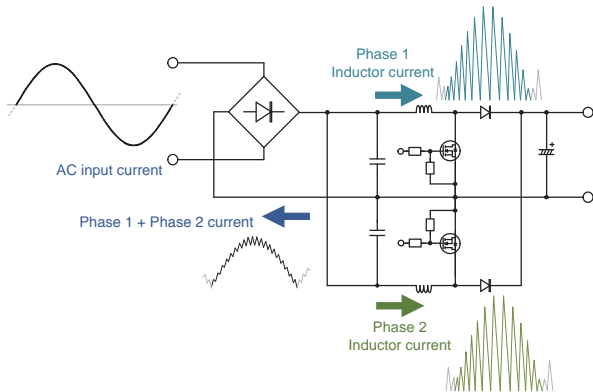
4. Power supply component reduction

The FA1C20N reduces the number of system components by eliminating the need for AC input voltage detection resistors and phase compensation circuits.



5. Critical conduction mode interleaved IC

The critical conduction mode interleaved PFC improves the power factor by switching at the appropriate timing.



FA1C20N series Function table

Item	FA1C20N
Zero current detection method	Winding detection
Gate clamp circuit	Built-in
Output overvoltage protection function	Built into FB pin, OVP pin
ON delay time adjustment	Selected by initial setting
Operating mode switching power adjustment	Selected by initial setting
Soft start function	Selected by initial setting
Maximum switching frequency limiting function	Selected by initial setting
Operating junction temperature	-40°C to +150°C
Package	SOP-16 (6.0mm×9.9mm)

⚠ Safety Precautions

- * Before using this product, read the "Instruction Manual" and "Specifications" carefully, and consult with the retailer from which you purchased this product as necessary to use this product correctly.
- * The product must be handled by a technician with the appropriate skills.

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