# DSP chip for photovoltaic inverter

Which controller is used in PV inverter?

Another controller used is low-pass filter in the feedback path along with harmonic compensator to improve the grid current quality [7 ]. Proportional resonant (PR) controlleris an algorithm used in the current controller which is used to integrate the PV inverter into the grid.

What control options are available in a power inverter?

However,in recent years,advances in technology programs and hardware costs decline,so that the performance of digital control has been greatly improved in the power inverter has made a variety of control options: the main digital PID control,deadbeat control,repeat control,hysteresis current control.

How a DSP based current controller works?

To achieve better tracking and disturbance rejection, a DSP-based current controller is designed with LCL filter. The controller gets the current feedback from the grid, compares it with reference current, and calculates duty cycle to generate PWM pulses to trigger H-bridge converters.

What is multifunction DSP?

Multifunction DSP provides the necessary inverter controls. For the PDF version of this article,click here. Low-cost,high-performance,high-density dc-ac inverters are key elements in UPS,fuel cell,solar,and wind array systems. A cost-effective solution to inverter design is based on advances in digital signal processor (DSP).

What is a distributed power generation inverter?

Inverters in distributed power generation (DG) systems include dc-ac conversion,output power quality assurance,various protection mechanisms,and system controls [4 ]. To compensate the grid harmonics and provide disturbance rejection capability,stationary-frame generalized integrators are used to control the fundamental current [5 ].

What is a photovoltaic power inverter?

Grid inverter for renewable energy and power generation in key equipment , and as a photovoltaic power generation system and grid interface to the main equipment, photovoltaic power inverter control technology has become a research hotspot.