



PAL22V10C PAL22VP10C

Universal PAL® Device

Features

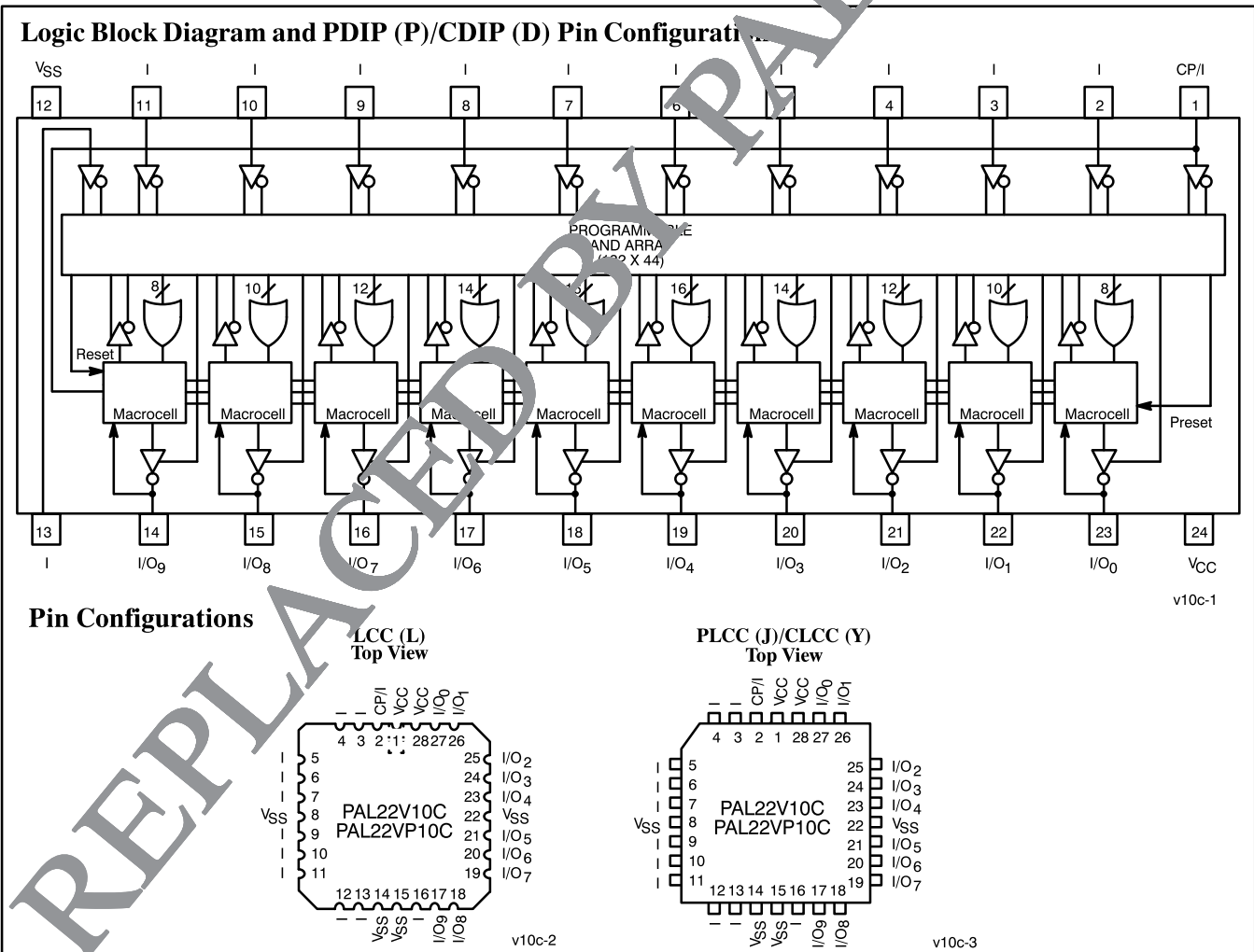
- Ultra high speed supports today's and tomorrow's fastest microprocessors
 - $t_{PD} = 6 \text{ ns}$
 - $t_{SU} = 3 \text{ ns}$
 - $f_{MAX} = 117 \text{ MHz}$
- Reduced ground bounce and under-shoot
- PLCC and LCC packages with additional V_{CC} and V_{SS} pins for lowest ground bounce
- Up to 22 inputs and 10 outputs for more logic power
- Variable product terms
 - 8 to 16 per output
- 10 user-programmable output macrocells
 - Output polarity control
 - Registered or combinatorial operation
 - 2 new feedback paths (PAL22VP10C)
- Synchronous PRESET, asynchronous RESET, and PRELOAD capability for flexible design and testability
- High reliability
 - Proven Ti-W fuse technology
 - AC and DC tested at the factory
- Security Fuse

programmable array logic devices. Using BiCMOS process and Ti-W fuses, the PAL22V10C and PAL22VP10C use the familiar sum-of-products (AND-OR) logic structure and a new concept, the programmable macrocell.

Both the PAL22V10C and PAL22VP10C provide 12 dedicated input pins and 10 I/O pins (see Logic Block Diagram). By selecting each I/O pin as either permanent or temporary input, up to 22 inputs can be achieved. Applications requiring up to 21 inputs and a single output, down to 12 inputs and 10 outputs can be realized. The output variable product term available on each I/O allows this selection.

Functional Description

The Cypress PAL22V10C and PAL22VP10C are second-generation programmable array logic devices. The PAL22V10C and PAL22VP10C feature variable product term architecture, where 8 to 16 product terms are allocated to each output.



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