



This is an abbreviated datasheet. Contact a Cypress representative for complete specifications. For new designs, please refer to the PALC22V10D or PAL22V10G.

# PAL22V10CF PAL22VP10CF

## Universal PAL® Device

### Features

- Ultra high speed supports today's and tomorrow's fastest microprocessors
  - $t_{PD} = 7.5 \text{ ns}$
  - $t_S = 3 \text{ ns}$
  - $f_{MAX} = 100 \text{ MHz}$
  - Drives 50-pF load ( $C_L$ )
- "No Connect" PLCC pinout
  - 8 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 (PAL22VP10CF)

- 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

### Functional Description

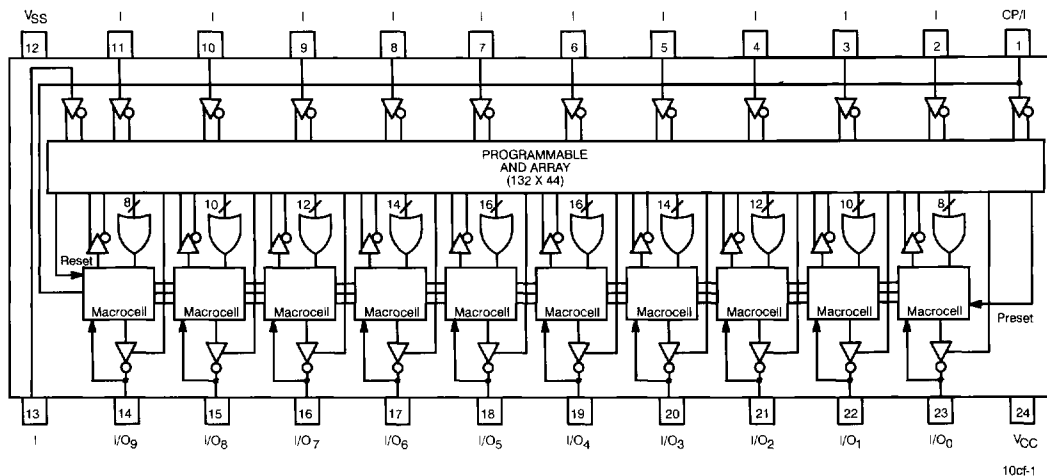
The Cypress PAL22V10CF and PAL22VP10CF are second-generation programmable array logic devices. Using BiCMOS process and Ti-W fuses, the PAL22V10CF and PAL22VP10CF use the familiar sum-of-products (AND-OR) logic structure and a new concept, the programmable macrocell.

Both the PAL22V10CF and PAL22VP10CF 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 enable product term available on each I/O allows this selection.

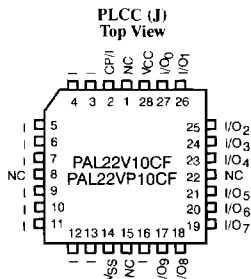
The PAL22V10CF and PAL22VP10CF feature variable product-term architecture, where 8 to 16 product terms are allocated to each output. This structure permits more applications to be implemented with these devices than with other PAL devices that have fixed number of product terms for each output.

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Logic Block Diagram and PDIP (P)/CDIP (D) Pin Configuration



### Pin Configuration



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