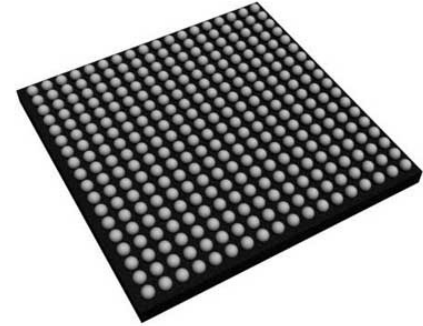


FPGA PolarFire Family 109000 Cells 325-Pin FCBGA Tray

|               |   |
|---------------|---|
| Manufacturers | <a href="#">Microchip Technology, Inc</a> |
| Package/Case  | 324-LFBGA                                 |
| Product Type  | Programmable Logic ICs                    |
| RoHS          |   |
| Lifecycle     |   |



Images are for reference only

Please submit RFQ for MPF100T-1FCSG325E or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

Award-winning PolarFire FPGAs deliver the industry's lowest power at mid-range densities with exceptional security and reliability. The product family spans from 100K logic elements (LEs) to 500K LEs, features 12.7G transceivers and offers up to 50% lower power than competing mid-range FPGAs. The devices are ideal for a wide range of applications within wireline access networks and cellular infrastructure, defense and commercial aviation markets, as well as industrial automation and IoT markets. Get started with your design today by downloading the Libero SoC PolarFire Design Suite and ordering a PolarFire development kit that best matches your needs.

## Cost-optimized Architecture

Architecture and process optimizations for 100K/500K LE devices

Transceiver performance optimized for 12.7 Gbps, which yields smaller size

1.6 Gbps I/Os supporting DDR4/DDR3/LPDDR3, LVDS - hardened I/O gearing logic with CDR (supports SGMII/GbE links on GPIOs)

Best-in-class high-performance, hardened security IP in mid-range devices

## Power Optimization

The lowest static power—1/10 static power vs. competing devices

Transceiver optimized for 12.7 Gbps, which yields 1/2 the power vs. competing devices

Integrated hard IP—DDR PHY, PCIe endpoint/root port, crypto processor

Total power (static and dynamic)—up to 50% lower power

## PolarFire FPGA Architecture

PolarFire FPGAs deliver up to 500K logic elements, 12.7G transceivers at 50% lower power.

PolarFire FPGAs offer various device offerings such as design security with transceivers, low power transceiver devices, data security with transceivers, and low power data security with transceiver devices. All PolarFire FPGAs are integrated with multi-protocol industry-leading low-power transceivers. Low power (L) devices provide up to 35% lower static power. Also, data security (S) devices have an integrated DPA safe crypto accelerator. PolarFire Devices are currently offered in Extended Commercial (0°C to 100°C) and Industrial (-40°C to 100°C) device offerings.

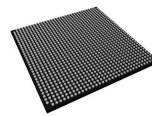
PolarFire cost-optimized FPGAs deliver the lowest power at mid-range densities with 12.7 Gbps SerDes transceivers as well as best-in-class security and reliability. They offer unprecedented capabilities and value with 10G transceivers, advanced I/Os, security and DSP capabilities while maintaining all the advantages traditionally associated with non-volatile FPGAs such as static power, security and single event upset (SEU) immunity. The devices are ideal for a wide range of applications within wireline access networks and cellular infrastructure, defense and commercial aviation markets, as well as industrial automation and IoT Markets

## Related Products



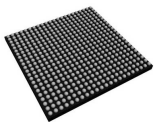
### [MPF500TS-FC1152M](#)

Microchip Technology, Inc  
BGA



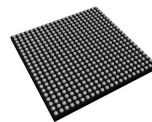
### [MPF300TS-1FCG1152I](#)

Microchip Technology, Inc  
1152-BBGA, FCBGA



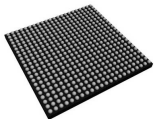
### [MPF300T-FCVG484E](#)

Microchip Technology, Inc  
484-BBGA, FCBGA



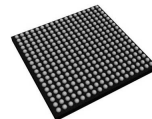
### [MPF300T-FCVG484I](#)

Microchip Technology, Inc  
484-BBGA, FCBGA



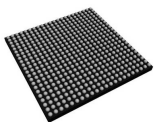
### [MPF300T-FCG484I](#)

Microchip Technology, Inc  
484-BBGA, FCBGA



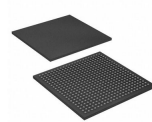
### [MPF200T-FCSG325I](#)

Microchip Technology, Inc  
324-LFBGA



### [MPF100T-FCG484I](#)

Microchip Technology, Inc  
484-BBGA, FCBGA



### [MPF100T-FCVG484I](#)

Microchip Technology, Inc  
484-BFBGA