



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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MPC574xP Microcontroller

Power Architecture®-based MCU
for Automotive and Industrial Applications

Product One-Sheet

Data Sheet

Tools

Buy

Performance—2 x e200z4 cores in delayed lockstep operating up to 200 MHz, embedded floating point unit, 32-channel eDMA in delayed lockstep

High Reliability—AEC-Q100, automotive quality, up to 135°C ambient temperature

Abundant Features—FlexCAN, LINFlexD, DSPI, SENT, LFAST SIPI support, Dual-channel FlexRay™, Ethernet

Functional Safety—Built to support functional safety (ISO 26262/ASIL D and IEC 61508 SIL3), end-to-end ECC

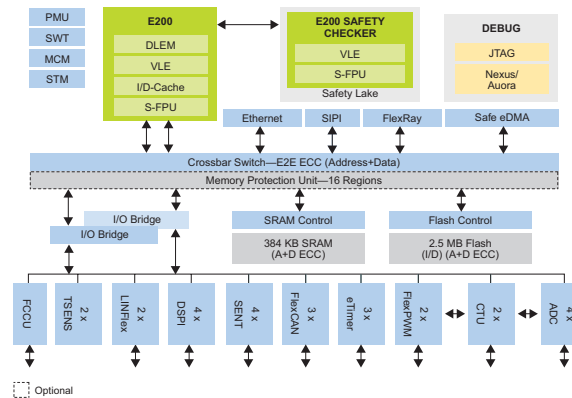
MPC574xP Specifications

Flash	Up to 2.5 MB	Timer/PWM	2 x FlexPWM w/ 4 x (2+1) ch.
RAM	Up to 384 KB	Other Timer	2 x eTimer w/ 6-ch., 1 x PIT / STM w/ 4-ch., SWT
Core	2 x e200z4 lockstep	Analog	4 x 12 bit ADC w/ 16-ch.
Speed	Up to 200 MHz	Comm	SENT, ADC, FlexCAN, FlexRay, LinFlex, DSPI, FlexPWM and SIPI/LFAST 3G IF
Package	144 LQFP/257 BGA		Safety
Op Range	3.15 V to 5.5 V		
Temp	-40°C to up to 135°C		

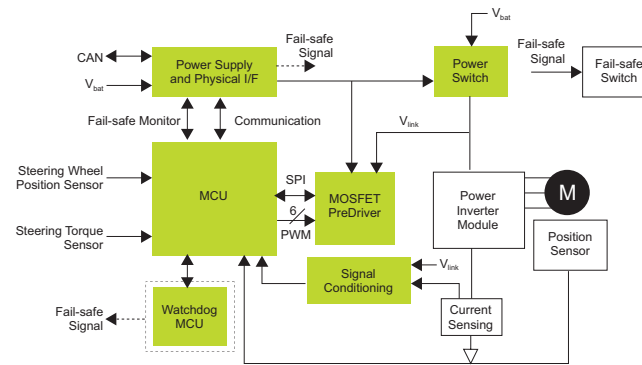
Orderable Samples

Part Number	Temp. Range	Flash	SRAM	Package
SPC5744P	-40°C to 125°C	2.5 MB	384 KB	144 LQFP/257 BGA
SPC5743P	-40°C to 125°C	2 MB	256 KB	144 LQFP/257 BGA
SPC5742P	-40°C to 125°C	1.5 MB	192 KB	144 LQFP/257 BGA
SPC5741P	-40°C to 125°C	1 MB	128 KB	144 LQFP/257 BGA

MPC574xP Block Diagram



Motor Control Application



Success Stories

- ▶ Electronic power steering
- ▶ Wireless charging
- ▶ Shock controller
- ▶ DC-DC converter

Target Applications

- ▶ Electric power steering (EPS)
- ▶ Airbag system
- ▶ Safety domain control
- ▶ Safety motor controller
- ▶ Active driver assistance system
- ▶ Adaptive cruise control
- ▶ Braking and stability control
- ▶ Active suspension

Enablement Tools

- ▶ Development hardware:
 - Mother evaluation board
 - Daughter adapter boards
- ▶ Runtime software:
 - Flash and EEPROM driver
- ▶ Compiler: Green Hills, Wind River
- ▶ Debugger: Lauterbach, iSystem, PLS



www.nxp.com/MPC574xP

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