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### What is "[Embedded - Microcontrollers](#)"?

"[Embedded - Microcontrollers](#)" refer to small, integrated circuits designed to perform specific tasks within larger systems. These microcontrollers are essentially compact computers on a single chip, containing a processor core, memory, and programmable input/output peripherals. They are called "embedded" because they are embedded within electronic devices to control various functions, rather than serving as standalone computers. Microcontrollers are crucial in modern electronics, providing the intelligence and control needed for a wide range of applications.

### Applications of "[Embedded - Microcontrollers](#)"

#### Details

|                            |                                                                                                                                                                 |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Status             | Obsolete                                                                                                                                                        |
| Core Processor             | e200z420                                                                                                                                                        |
| Core Size                  | 32-Bit Dual-Core                                                                                                                                                |
| Speed                      | 180MHz                                                                                                                                                          |
| Connectivity               | CANbus, Ethernet, FlexRay, I <sup>2</sup> C, LINbus, SPI                                                                                                        |
| Peripherals                | DMA                                                                                                                                                             |
| Number of I/O              | 64                                                                                                                                                              |
| Program Memory Size        | 4MB (4M x 8)                                                                                                                                                    |
| Program Memory Type        | FLASH                                                                                                                                                           |
| EEPROM Size                | 128K x 8                                                                                                                                                        |
| RAM Size                   | 512K x 8                                                                                                                                                        |
| Voltage - Supply (Vcc/Vdd) | 3.3V, 5V                                                                                                                                                        |
| Data Converters            | -                                                                                                                                                               |
| Oscillator Type            | Internal                                                                                                                                                        |
| Operating Temperature      | -40°C ~ 125°C                                                                                                                                                   |
| Mounting Type              | Surface Mount                                                                                                                                                   |
| Package / Case             | 176-LQFP Exposed Pad                                                                                                                                            |
| Supplier Device Package    | 176-eLQFP (24x24)                                                                                                                                               |
| Purchase URL               | <a href="https://www.e-xfl.com/product-detail/stmicroelectronics/spc58ec80e7qmc0y">https://www.e-xfl.com/product-detail/stmicroelectronics/spc58ec80e7qmc0y</a> |

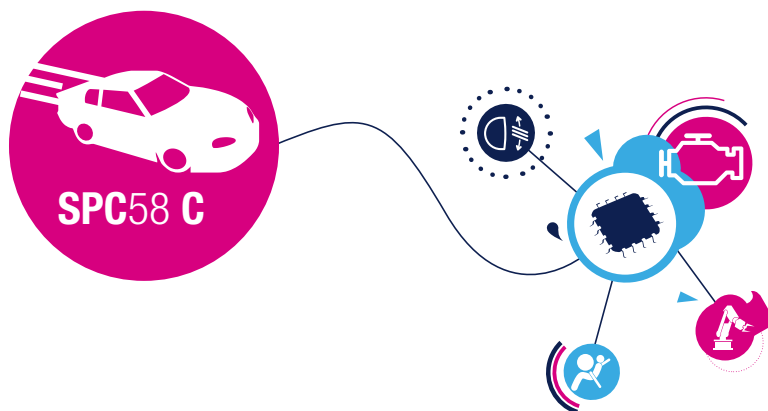
# SPC58 B/C/G-lines

## automotive MCUs for car body and security applications



### Product Selector Guide

life.augmented



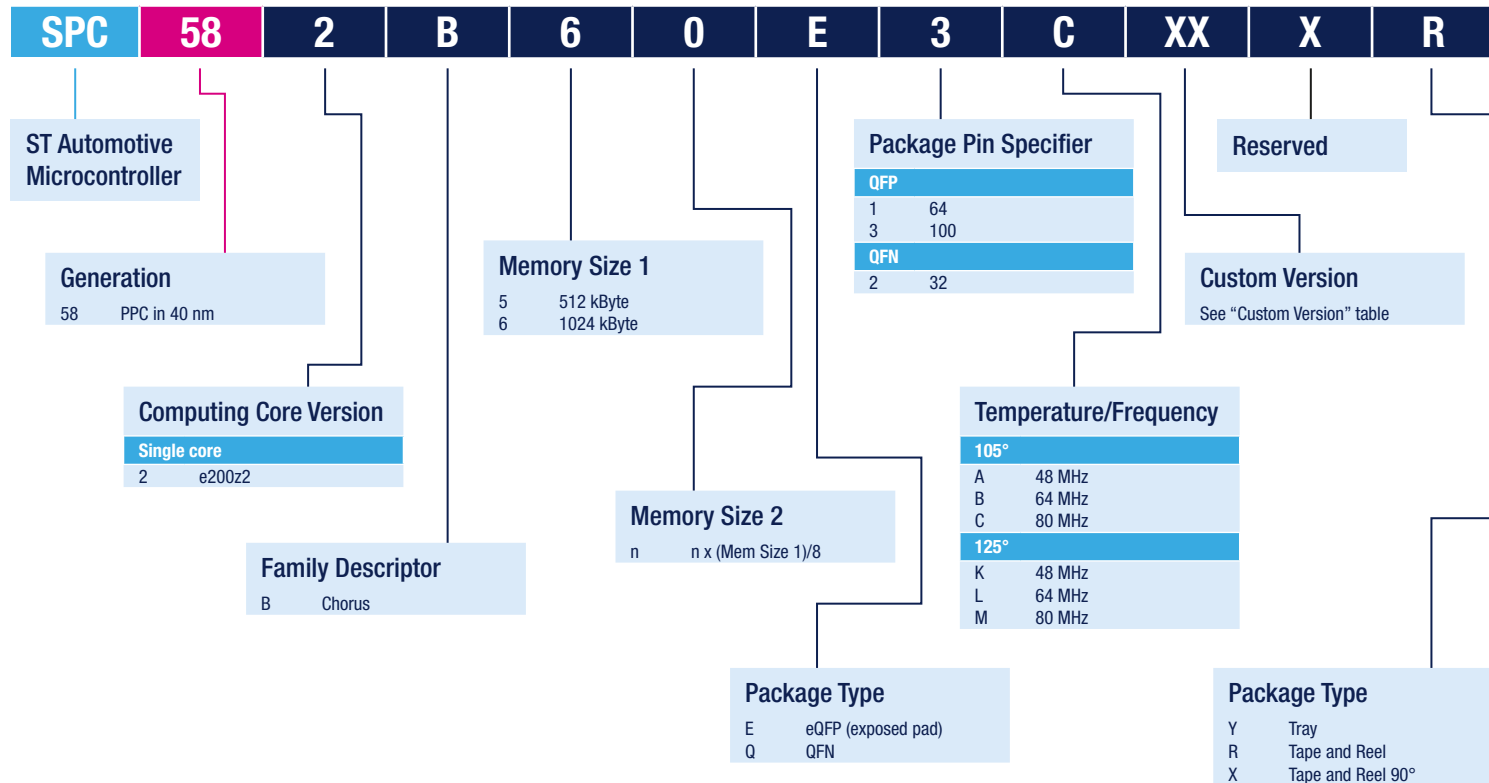
SPC58 Chorus Root Part Number summary table

|         |                               | FLASH |                 | RAM <sup>1)</sup> | Core  | Root Part Number |         |             |             | Options <sup>2)</sup> (subject to change) |                                                                                 |                                                                                                               |
|---------|-------------------------------|-------|-----------------|-------------------|-------|------------------|---------|-------------|-------------|-------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| G-Line  | SPC584G<br>SPC58EG<br>SPC58NG | 6M    |                 | 768K              | 3x z4 |                  |         |             | SPC58NG84E5 | SPC58NG84E7                               | SPC58NG84C3                                                                     | Freq.:<br>120MHz/160MHz/180MHz<br>Ethernet: 0 / 1 / 2<br>HSM: Yes/No<br>ASIL-D: Yes/No                        |
|         |                               |       |                 | 768K              | 2x z4 |                  |         |             | SPC58EG84E5 | SPC58EG84E7                               | SPC58EG84C3                                                                     |                                                                                                               |
|         |                               |       | 256K<br>(4x 64) | 640K              | 1x z4 |                  |         |             |             | SPC584G84E5                               | SPC584G84E7                                                                     |                                                                                                               |
|         | 4M                            |       | 768K            | 3x z4             |       |                  |         |             | SPC58NG84E5 | SPC58NG84E7                               | SPC58NG84C3                                                                     |                                                                                                               |
|         |                               |       | 768K            | 2x z4             |       |                  |         |             | SPC58EG80E5 | SPC58EG80E7                               | SPC58EG80C3                                                                     |                                                                                                               |
|         |                               |       | 512K            | 1x z4             |       |                  |         |             | SPC584G80E5 | SPC584G80E7                               | SPC584G80C3                                                                     |                                                                                                               |
| C-Line  | SPC584C<br>SPC58EC            | 4M    |                 | 512K              | 2x z4 |                  |         |             | SPC58EC80E5 | SPC58EC80E7                               | SPC58EC80C3                                                                     | Freq.:<br>120MHz/160MHz/180MHz<br>Ethernet: 0 / 1<br>FlyRay: 0 / 1<br>Security (HSM): Yes/No                  |
|         |                               |       |                 | 384K              | 1x z4 |                  |         |             |             | SPC584C80E5                               | SPC584C80E7                                                                     |                                                                                                               |
|         |                               | 3M    | 128K<br>(4x 32) | 416K              | 2x z4 |                  |         |             |             | SPC58EC74E5                               | SPC58EC74E7                                                                     |                                                                                                               |
|         |                               |       |                 | 320K              | 1x z4 |                  |         |             |             | SPC584C74E5                               | SPC584C74E7                                                                     |                                                                                                               |
|         | 2M                            |       |                 | 320K              | 2x z4 |                  |         |             |             | SPC58EC70E5                               | SPC58EC70E7                                                                     |                                                                                                               |
|         |                               |       | 256K            | 1x z4             |       |                  |         |             | SPC584C70E5 | SPC584C70E7                               | SPC584C70C3                                                                     |                                                                                                               |
| 4B-Line | SPC584B                       | 2M    |                 | 192K              |       |                  |         |             | SPC584B70E5 | SPC584B70E7                               |                                                                                 | Freq.: 80MHz/120MHz<br>CAN <sup>3)</sup> : 4ch / 8ch / Std / FD,<br>Ethernet: 0 / 1<br>Security (CSM): Yes/No |
|         |                               | 1.5M  | 64K<br>(4x 16)  | 160K              | 1x z4 |                  |         |             | SPC584B64E5 | SPC584B64E7                               |                                                                                 |                                                                                                               |
|         |                               | 1M    |                 | 128K              |       |                  |         |             | SPC584B60E5 | SPC584B60E7                               |                                                                                 |                                                                                                               |
| 2B-Line | SPC582B                       | 1M    |                 | 96K               |       |                  |         | SPC582B6002 | SPC582B60E5 |                                           | Freq.:<br>48MHz/64MHz/80MHz<br>CAN <sup>3)</sup> : 3ch / 7ch / Standard<br>/ FD |                                                                                                               |
|         |                               | 768K  | 64K<br>(4x 16)  | 80K               | 1x z2 |                  |         |             | SPC582B5402 | SPC582B54E5                               |                                                                                 |                                                                                                               |
|         |                               | 512K  |                 | 64K               |       |                  |         |             | SPC582B5002 | SPC582B50E5                               |                                                                                 |                                                                                                               |
|         |                               | Code  | Data            |                   |       | QFN32            | eTQFP64 | eTQFP100    | eTQFP144    | eLQFP176                                  | LFBGA292                                                                        |                                                                                                               |

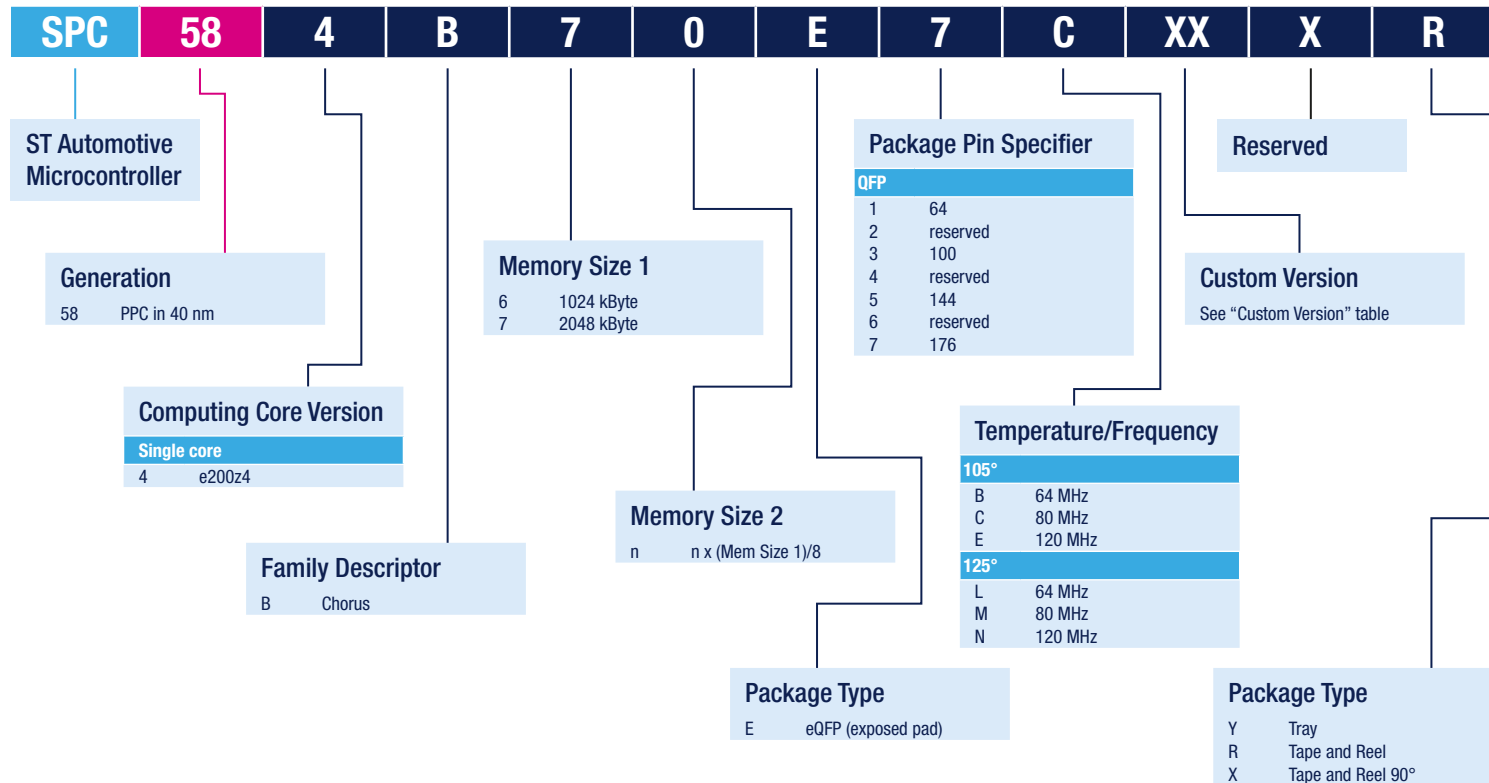
1) total RAM size = SRAM + DRAM  
2) Temp. Option: 105°C / 125°C (option available for all devices)  
3) CAN options: Number of channel and/or CAN protocol (std/FD)

| Line   | Part Number | Core           | CPU Clock Frequency max (MHz) | Package   | FLASH Size (Prog) | FLASH Size (Data) | Internal RAM Size | Serial Interface |     |         |                  |         | Timed I/Os | A/D Channels        | A/D Resolution | Cryptography |          |
|--------|-------------|----------------|-------------------------------|-----------|-------------------|-------------------|-------------------|------------------|-----|---------|------------------|---------|------------|---------------------|----------------|--------------|----------|
|        |             |                |                               |           |                   |                   |                   | SPI              | LIN | FD-MCAN | I <sup>2</sup> C | FlexRay |            |                     |                |              | Ethernet |
| G-Line | SPC58EG80E7 | Dual e200z4d   | 180                           | eTQFP 176 | 4096              | 256               | 768               | 10               | 18  | 8       | 1                | 1       | 2          | 63ch eMIOS (16-bit) | 58             | 5x12-bit     | HSM      |
|        | SPC58EG84C3 | Dual e200z4d   | 180                           | LFGBA 292 | 6144              | 256               | 768               | 10               | 18  | 8       | 1                | 1       | 2          | 64ch eMIOS (16-bit) | 82             | 5x12-bit     | HSM      |
|        | SPC58EG84E5 | Dual e200z4d   | 180                           | eTQFP 144 | 6144              | 256               | 768               | 10               | 18  | 8       | 1                | 1       | 2          | 62ch eMIOS (16-bit) | 48             | 5x12-bit     | HSM      |
|        | SPC58EG84E7 | Dual e200z4d   | 180                           | eTQFP 176 | 6144              | 256               | 768               | 10               | 18  | 8       | 1                | 1       | 2          | 63ch eMIOS (16-bit) | 58             | 5x12-bit     | HSM      |
|        | SPC58NG80C3 | Triple e200z4d | 180                           | LFGBA 292 | 4096              | 256               | 768               | 10               | 18  | 8       | 1                | 1       | 2          | 64ch eMIOS (16-bit) | 82             | 5x12-bit     | HSM      |
|        | SPC58NG80E5 | Triple e200z4d | 180                           | eTQFP 144 | 4096              | 256               | 768               | 10               | 18  | 8       | 1                | 1       | 2          | 62ch eMIOS (16-bit) | 48             | 5x12-bit     | HSM      |
|        | SPC58NG80E7 | Triple e200z4d | 180                           | eTQFP 176 | 4096              | 256               | 768               | 10               | 18  | 8       | 1                | 1       | 2          | 63ch eMIOS (16-bit) | 58             | 5x12-bit     | HSM      |
|        | SPC58NG84C3 | Triple e200z4d | 180                           | LFGBA 292 | 6144              | 256               | 768               | 10               | 18  | 8       | 1                | 1       | 2          | 64ch eMIOS (16-bit) | 82             | 5x12-bit     | HSM      |
|        | SPC58NG84E5 | Triple e200z4d | 180                           | eTQFP 144 | 6144              | 256               | 768               | 10               | 18  | 8       | 1                | 1       | 2          | 62ch eMIOS (16-bit) | 48             | 5x12-bit     | HSM      |
|        | SPC58NG84E7 | Triple e200z4d | 180                           | eTQFP 176 | 6144              | 256               | 768               | 10               | 18  | 8       | 1                | 1       | 2          | 63ch eMIOS (16-bit) | 58             | 5x12-bit     | HSM      |

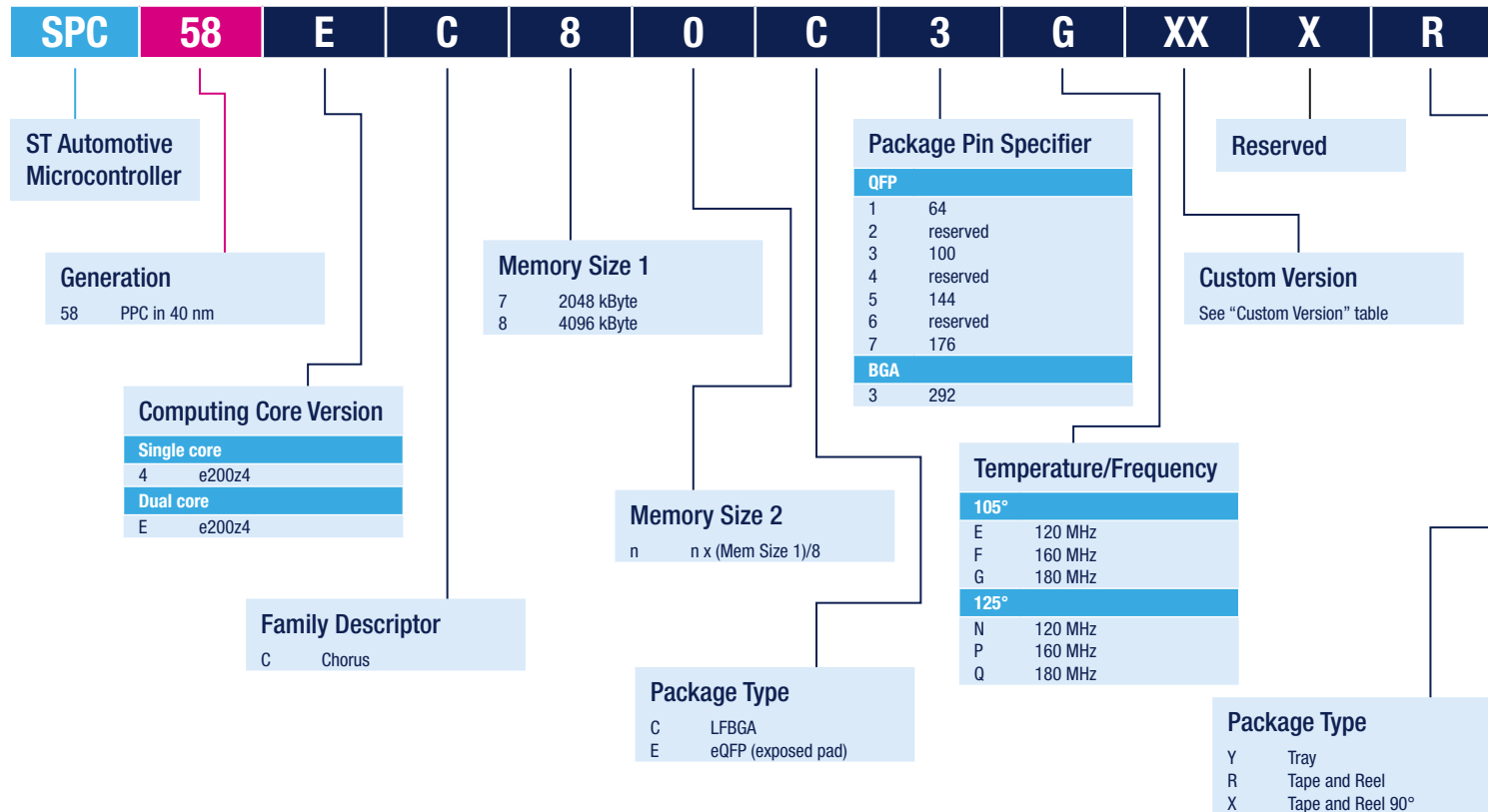
## SPC58 2B Line - Ordering Information



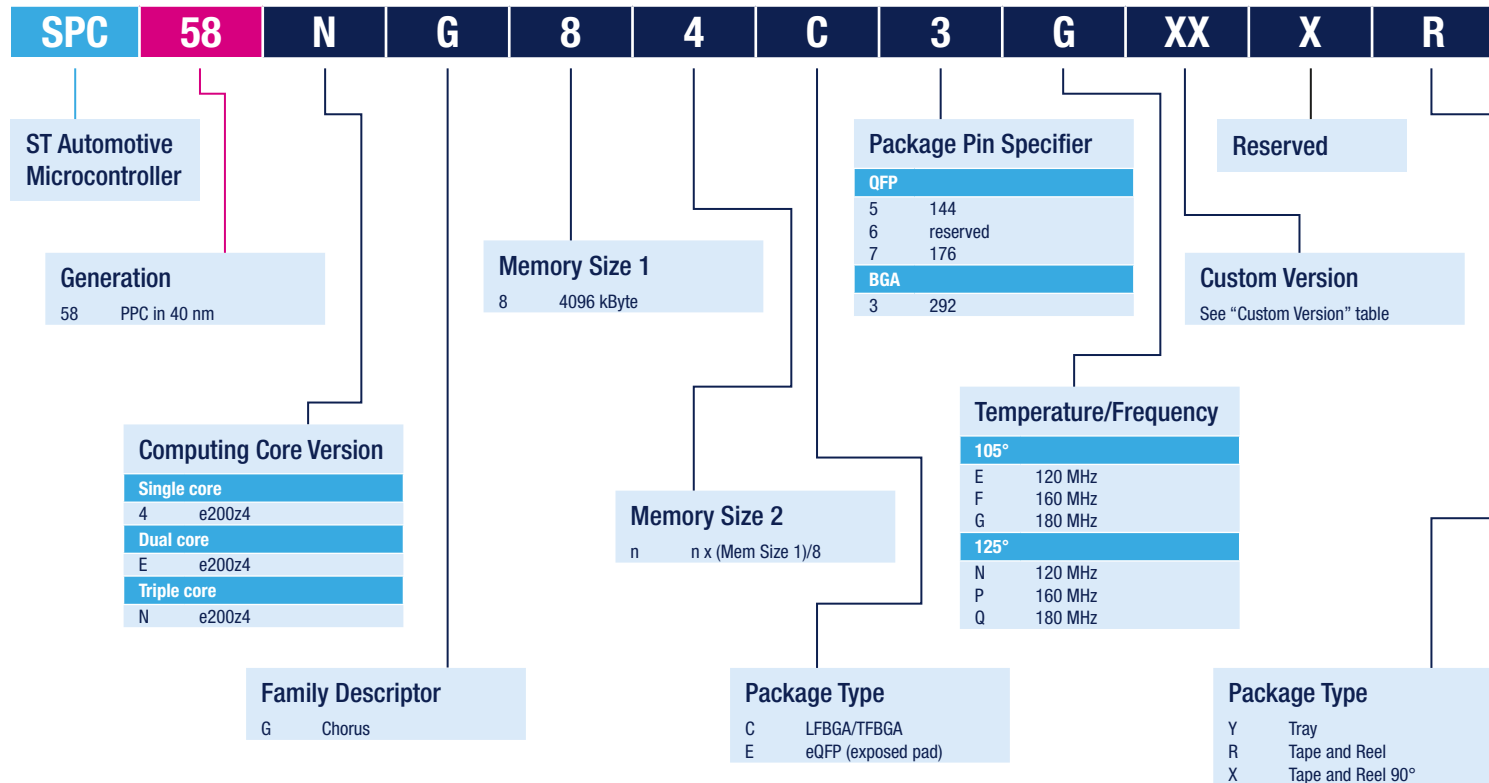
# SPC58 4B Line - Ordering Information



# SPC58 C Line - Ordering Information



# SPC58 G Line - Ordering Information



# SPC58 Chorus Custom Version

| 1st Digit (Serial Com. I/F)            |            |                       |          |         | 2nd Digit (Security) |          |             |             |        |
|----------------------------------------|------------|-----------------------|----------|---------|----------------------|----------|-------------|-------------|--------|
| Code                                   | ISO CAN FD | Gateway <sup>3)</sup> | Ethernet | FlexRay | Code                 | Ballast  | Security HW | Security FW | ASIL-D |
| SPC582Bx (CH01M)                       |            |                       |          |         |                      |          |             |             |        |
| <b>O</b>                               | no         | no                    | N/A      | N/A     | <b>O</b>             | Internal | N/A         |             |        |
| <b>D</b>                               | yes        | no                    | N/A      | N/A     |                      |          |             |             |        |
| <b>G</b>                               | no         | yes                   | N/A      | N/A     |                      |          |             |             |        |
| <b>H</b>                               | yes        | yes                   | N/A      | N/A     |                      |          |             |             |        |
| SPC584Bx (CH02M)                       |            |                       |          |         |                      |          |             |             |        |
| <b>O</b>                               | no         | no                    | no       | N/A     | <b>O</b>             | Internal | no          | no          | N/A    |
| <b>D</b>                               | yes        | no                    | no       | N/A     | <b>C</b>             | Internal | yes         | yes         | N/A    |
| <b>G</b>                               | no         | yes                   | no       | N/A     | <b>F</b>             | Internal | no          | yes         | N/A    |
| <b>H</b>                               | yes        | yes                   | no       | N/A     |                      |          |             |             |        |
| <b>E</b>                               | no         | no                    | yes      | N/A     |                      |          |             |             |        |
| <b>M</b>                               | yes        | yes                   | yes      | N/A     |                      |          |             |             |        |
| SPC584Cx / SPC58ECx (CH04M)            |            |                       |          |         |                      |          |             |             |        |
| <b>O</b>                               | yes        | yes                   | no       | no      | <b>O</b>             | External | no          | no          | N/A    |
| <b>E</b>                               | yes        | yes                   | yes      | no      | <b>C</b>             | External | yes         | no          | N/A    |
| <b>F</b>                               | yes        | yes                   | no       | yes     | <b>F</b>             | External | yes         | yes         | N/A    |
| <b>M</b>                               | yes        | yes                   | yes      | yes     | <b>I</b>             | Internal | no          | no          | N/A    |
|                                        |            |                       |          |         | <b>K</b>             | Internal | yes         | no          | N/A    |
|                                        |            |                       |          |         | <b>W</b>             | Internal | yes         | yes         | N/A    |
| SPC584Gx / SPC58EGx / SPC58NGx (CH06M) |            |                       |          |         |                      |          |             |             |        |
| <b>O</b>                               | yes        | yes                   | no       | yes     | <b>O</b>             | External | no          | no          | no     |
| <b>E</b>                               | yes        | yes                   | 1x       | yes     | <b>C</b>             | External | yes         | no          | no     |
| <b>T</b>                               | yes        | yes                   | 2x       | yes     | <b>F</b>             | External | yes         | yes         | no     |
|                                        |            |                       |          |         | <b>S</b>             | External | No          | no          | yes    |
|                                        |            |                       |          |         | <b>H</b>             | External | yes         | no          | yes    |
|                                        |            |                       |          |         | <b>M</b>             | External | yes         | yes         | yes    |

1) Custom option list is specific to each Chorus device e.g. SPC582Bx, SPC584Bx etc.

2) Features not reported in the list of options below are available by default in all configuration of a device

3) Gateway: CH01M = 7x CAN, CH02M/4M/6M = 8x CAN

# Device Summary

| Line    | Part Number | Core    | CPU Clock Frequency max (MHz) | Package   | FLASH Size (Prog) | FLASH Size (Data) | Internal RAM Size | Serial Interface |     |         |                  |         |          | Timed I/Os          | A/D Channels | A/D Resolution     | Cryptography |
|---------|-------------|---------|-------------------------------|-----------|-------------------|-------------------|-------------------|------------------|-----|---------|------------------|---------|----------|---------------------|--------------|--------------------|--------------|
|         |             |         |                               |           |                   |                   |                   | SPI              | LIN | FD-MCAN | I <sup>2</sup> C | FlexRay | Ethernet |                     |              |                    |              |
| 2B-Line | SPC582B50E1 | e200z2  | 80                            | eTQFP 64  | 512               | 64                | 64                | 4                | 5   | 7       | 1                | -       | -        | 28ch eMIOS (16-bit) | 18           | 1x10 or 12-bit     | -            |
|         | SPC582B50E3 | e200z2  | 80                            | eTQFP 100 | 512               | 64                | 64                | 4                | 5   | 7       | 1                | -       | -        | 28ch eMIOS (16-bit) | 32           | 1x10 or 12-bit     | -            |
|         | SPC582B50Q2 | e200z2  | 80                            | QFN 32    | 512               | 64                | 64                | 4                | 5   | 6       | 1                | -       | -        | 28ch eMIOS (16-bit) | 6            | 1x10 or 12-bit     | -            |
|         | SPC582B54E1 | e200z2  | 80                            | eTQFP 64  | 768               | 64                | 80                | 4                | 5   | 7       | 1                | -       | -        | 28ch eMIOS (16-bit) | 18           | 1x10 or 12-bit     | -            |
|         | SPC582B54E3 | e200z2  | 80                            | eTQFP 100 | 768               | 64                | 80                | 4                | 5   | 7       | 1                | -       | -        | 28ch eMIOS (16-bit) | 32           | 1x10 or 12-bit     | -            |
|         | SPC582B54Q2 | e200z2  | 80                            | QFN 32    | 768               | 64                | 80                | 4                | 5   | 6       | 1                | -       | -        | 28ch eMIOS (16-bit) | 6            | 1x10 or 12-bit     | -            |
|         | SPC582B60E1 | e200z2  | 80                            | eTQFP 64  | 1024              | 64                | 96                | 4                | 5   | 7       | 1                | -       | -        | 28ch eMIOS (16-bit) | 18           | 1x10 or 12-bit     | -            |
|         | SPC582B60E3 | e200z2  | 80                            | eTQFP 100 | 1024              | 64                | 96                | 4                | 5   | 7       | 1                | -       | -        | 28ch eMIOS (16-bit) | 32           | 1x10 or 12-bit     | -            |
| 4B-Line | SPC582B60Q2 | e200z2  | 80                            | QFN 32    | 1024              | 64                | 96                | 4                | 5   | 6       | 1                | -       | -        | 28ch eMIOS (16-bit) | 6            | 1x10 or 12-bit     | -            |
|         | SPC584B60E1 | e200z4d | 120                           | eTQFP 64  | 1024              | 64                | 128               | 7                | 10  | 8       | 1                | -       | -        | 48ch eMIOS (16-bit) | 18           | 1x10-bit; 3x12-bit | HSM          |
|         | SPC584B60E3 | e200z4d | 120                           | eTQFP 100 | 1024              | 64                | 128               | 7                | 10  | 8       | 1                | -       | 1        | 61ch eMIOS (16-bit) | 32           | 1x10-bit; 3x12-bit | HSM          |
|         | SPC584B60E5 | e200z4d | 120                           | eTQFP 144 | 1024              | 64                | 128               | 7                | 10  | 8       | 1                | -       | 1        | 64ch eMIOS (16-bit) | 49           | 1x10-bit; 3x12-bit | HSM          |
|         | SPC584B60E7 | e200z4d | 120                           | eTQFP 176 | 1024              | 64                | 128               | 7                | 10  | 8       | 1                | -       | 1        | 64ch eMIOS (16-bit) | 63           | 1x10-bit; 3x12-bit | HSM          |
|         | SPC584B64E1 | e200z4d | 120                           | eTQFP 64  | 1536              | 64                | 160               | 7                | 10  | 8       | 1                | -       | -        | 48ch eMIOS (16-bit) | 18           | 1x10-bit; 3x12-bit | HSM          |
|         | SPC584B64E3 | e200z4d | 120                           | eTQFP 100 | 1536              | 64                | 160               | 7                | 10  | 8       | 1                | -       | 1        | 61ch eMIOS (16-bit) | 32           | 1x10-bit; 3x12-bit | HSM          |
|         | SPC584B64E5 | e200z4d | 120                           | eTQFP 144 | 1536              | 64                | 160               | 7                | 10  | 8       | 1                | -       | 1        | 64ch eMIOS (16-bit) | 49           | 1x10-bit; 3x12-bit | HSM          |
|         | SPC584B64E7 | e200z4d | 120                           | eTQFP 176 | 1536              | 64                | 160               | 7                | 10  | 8       | 1                | -       | 1        | 64ch eMIOS (16-bit) | 63           | 1x10-bit; 3x12-bit | HSM          |
|         | SPC584B70E1 | e200z4d | 120                           | eTQFP 64  | 2048              | 64                | 192               | 7                | 10  | 8       | 1                | -       | -        | 48ch eMIOS (16-bit) | 18           | 1x10-bit; 3x12-bit | HSM          |
|         | SPC584B70E3 | e200z4d | 120                           | eTQFP 100 | 2048              | 64                | 192               | 7                | 10  | 8       | 1                | -       | 1        | 61ch eMIOS (16-bit) | 32           | 1x10-bit; 3x12-bit | HSM          |
|         | SPC584B70E5 | e200z4d | 120                           | eTQFP 144 | 2048              | 64                | 192               | 7                | 10  | 8       | 1                | -       | 1        | 64ch eMIOS (16-bit) | 49           | 1x10-bit; 3x12-bit | HSM          |
|         | SPC584B70E7 | e200z4d | 120                           | eTQFP 176 | 2048              | 64                | 192               | 7                | 10  | 8       | 1                | -       | 1        | 64ch eMIOS (16-bit) | 63           | 1x10-bit; 3x12-bit | HSM          |

| Line   | Part Number | Core         | CPU Clock Frequency max (MHz) | Package   | FLASH Size (Prog) | FLASH Size (Data) | Internal RAM Size | Serial Interface |     |         |                  |         |          | Timed I/Os          | A/D Channels | A/D Resolution     | Cryptography |
|--------|-------------|--------------|-------------------------------|-----------|-------------------|-------------------|-------------------|------------------|-----|---------|------------------|---------|----------|---------------------|--------------|--------------------|--------------|
|        |             |              |                               |           |                   |                   |                   | SPI              | LIN | FD-MCAN | I <sup>2</sup> C | FlexRay | Ethernet |                     |              |                    |              |
| C-Line | SPC584C70C3 | e200z4d      | 180                           | LFGBA 292 | 2000              | 128               | 256               | 8                | 18  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 95           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C70E1 | e200z4d      | 180                           | eTQFP 64  | 2000              | 128               | 256               | 5                | 9   | 8       | 1                | -       | -        | 48ch eMIOS (16-bit) | 18           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C70E3 | e200z4d      | 180                           | eTQFP 100 | 2000              | 128               | 256               | 8                | 16  | 8       | 1                | 1       | 1        | 61ch eMIOS (16-bit) | 32           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C70E5 | e200z4d      | 180                           | eTQFP 144 | 2000              | 128               | 256               | 8                | 16  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 49           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C70E7 | e200z4d      | 180                           | eTQFP 176 | 2000              | 128               | 256               | 8                | 18  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 63           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C74C3 | e200z4d      | 180                           | LFGBA 292 | 3000              | 128               | 320               | 8                | 18  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 95           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C74E1 | e200z4d      | 180                           | eTQFP 64  | 3000              | 128               | 320               | 5                | 9   | 8       | 1                | -       | -        | 48ch eMIOS (16-bit) | 18           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C74E3 | e200z4d      | 180                           | eTQFP 100 | 3000              | 128               | 320               | 8                | 16  | 8       | 1                | 1       | 1        | 61ch eMIOS (16-bit) | 32           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C74E5 | e200z4d      | 180                           | eTQFP 144 | 3000              | 128               | 320               | 8                | 16  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 49           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C74E7 | e200z4d      | 180                           | eTQFP 176 | 3000              | 128               | 320               | 8                | 18  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 63           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C80C3 | e200z4d      | 180                           | LFGBA 292 | 4000              | 128               | 384               | 8                | 18  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 95           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C80E1 | e200z4d      | 180                           | eTQFP 64  | 4000              | 128               | 384               | 5                | 9   | 8       | 1                | -       | -        | 48ch eMIOS (16-bit) | 18           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C80E3 | e200z4d      | 180                           | eTQFP 100 | 4000              | 128               | 384               | 8                | 16  | 8       | 1                | 1       | 1        | 61ch eMIOS (16-bit) | 32           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C80E5 | e200z4d      | 180                           | eTQFP 144 | 4000              | 128               | 384               | 8                | 16  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 49           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC584C80E7 | e200z4d      | 180                           | eTQFP 176 | 4000              | 128               | 384               | 8                | 18  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 63           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC70C3 | Dual e200z4d | 180                           | LFGBA 292 | 2000              | 128               | 320               | 8                | 18  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 95           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC70E1 | Dual e200z4d | 180                           | eTQFP 64  | 2000              | 128               | 320               | 5                | 9   | 8       | 1                | -       | -        | 48ch eMIOS (16-bit) | 18           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC70E3 | Dual e200z4d | 180                           | eTQFP 100 | 2000              | 128               | 320               | 8                | 16  | 8       | 1                | 1       | 1        | 61ch eMIOS (16-bit) | 32           | 1x10-bit; 5x12-bit | HSM          |

| Line   | Part Number | Core         | CPU Clock Frequency max (MHz) | Package   | FLASH Size (Prog) | FLASH Size (Data) | Internal RAM Size | Serial Interface |     |         |                  |         |          | Timed I/Os          | A/D Channels | A/D Resolution     | Cryptography |
|--------|-------------|--------------|-------------------------------|-----------|-------------------|-------------------|-------------------|------------------|-----|---------|------------------|---------|----------|---------------------|--------------|--------------------|--------------|
|        |             |              |                               |           |                   |                   |                   | SPI              | LIN | FD-MCAN | I <sup>2</sup> C | FlexRay | Ethernet |                     |              |                    |              |
| C-Line | SPC58EC70E5 | Dual e200z4d | 180                           | eTQFP 144 | 2000              | 128               | 320               | 8                | 16  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 49           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC70E7 | Dual e200z4d | 180                           | eTQFP 176 | 2000              | 128               | 320               | 8                | 18  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 63           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC74C3 | Dual e200z4d | 180                           | LFGBA 292 | 3000              | 128               | 416               | 8                | 18  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 95           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC74E1 | Dual e200z4d | 180                           | eTQFP 64  | 3000              | 128               | 416               | 5                | 9   | 8       | 1                | -       | -        | 48ch eMIOS (16-bit) | 18           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC74E3 | Dual e200z4d | 180                           | eTQFP 100 | 3000              | 128               | 416               | 8                | 16  | 8       | 1                | 1       | 1        | 61ch eMIOS (16-bit) | 32           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC74E5 | Dual e200z4d | 180                           | eTQFP 144 | 3000              | 128               | 416               | 8                | 16  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 49           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC74E7 | Dual e200z4d | 180                           | eTQFP 176 | 3000              | 128               | 416               | 8                | 18  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 63           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC80C3 | Dual e200z4d | 180                           | LFGBA 292 | 4000              | 128               | 512               | 8                | 18  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 95           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC80E1 | Dual e200z4d | 180                           | eTQFP 64  | 4000              | 128               | 512               | 5                | 9   | 8       | 1                | -       | -        | 48ch eMIOS (16-bit) | 18           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC80E3 | Dual e200z4d | 180                           | eTQFP 100 | 4000              | 128               | 512               | 8                | 16  | 8       | 1                | 1       | 1        | 61ch eMIOS (16-bit) | 32           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC80E5 | Dual e200z4d | 180                           | eTQFP 144 | 4000              | 128               | 512               | 8                | 16  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 49           | 1x10-bit; 5x12-bit | HSM          |
|        | SPC58EC80E7 | Dual e200z4d | 180                           | eTQFP 176 | 4000              | 128               | 512               | 8                | 18  | 8       | 1                | 1       | 1        | 64ch eMIOS (16-bit) | 63           | 1x10-bit; 5x12-bit | HSM          |
| G-Line | SPC584G80C3 | e200z4d      | 180                           | LFGBA 292 | 4096              | 256               | 512               | 10               | 18  | 8       | 1                | 1       | 2        | 64ch eMIOS (16-bit) | 82           | 5x12-bit           | HSM          |
|        | SPC584G80E5 | e200z4d      | 180                           | eTQFP 144 | 4096              | 256               | 512               | 10               | 18  | 8       | 1                | 1       | 2        | 62ch eMIOS (16-bit) | 48           | 5x12-bit           | HSM          |
|        | SPC584G80E7 | e200z4d      | 180                           | eTQFP 176 | 4096              | 256               | 512               | 10               | 18  | 8       | 1                | 1       | 2        | 63ch eMIOS (16-bit) | 58           | 5x12-bit           | HSM          |
|        | SPC584G84C3 | e200z4d      | 180                           | LFGBA 292 | 6144              | 256               | 640               | 10               | 18  | 8       | 1                | 1       | 2        | 64ch eMIOS (16-bit) | 82           | 5x12-bit           | HSM          |
|        | SPC584G84E5 | e200z4d      | 180                           | eTQFP 144 | 6144              | 256               | 640               | 10               | 18  | 8       | 1                | 1       | 2        | 62ch eMIOS (16-bit) | 48           | 5x12-bit           | HSM          |
|        | SPC584G84E7 | e200z4d      | 180                           | eTQFP 176 | 6144              | 256               | 640               | 10               | 18  | 8       | 1                | 1       | 2        | 63ch eMIOS (16-bit) | 58           | 5x12-bit           | HSM          |
|        | SPC58EG80C3 | Dual e200z4d | 180                           | LFGBA 292 | 4096              | 256               | 768               | 10               | 18  | 8       | 1                | 1       | 2        | 64ch eMIOS (16-bit) | 82           | 5x12-bit           | HSM          |
|        | SPC58EG80E5 | Dual e200z4d | 180                           | eTQFP 144 | 4096              | 256               | 768               | 10               | 18  | 8       | 1                | 1       | 2        | 62ch eMIOS (16-bit) | 48           | 5x12-bit           | HSM          |