| ( I2C           | N/A            | N/A      | N/A        | N/A 120     | C1_SDA   I2C1 | _SCL     | N/A              | I2C1_SDA                     | I2C1_SC                    | CL   I2C1_9         | SMBA                      | N/A                    | N/A                  | N/A          | N/A N/A       | A   Λ       | I/A         | N/A          | N/A                     | N/A          | N/A         | N/A I        | N/A                     | N/A                   | N/A N/A                  | /A N/A                                       | N/A         | N/A            | N/A                     | N/A                  | N/A                        | N/A        | N/A         | N/A        | N/A        | N/A        | N/A          | N/A N            | V/A N/      | /A N/A                                | N/A          | N/         | /A N/A                        | N/A          | N/A         | N/A                  | I2C2_SDA     | I2C2_SCL      | I2C2_SMB/                |
|-----------------|----------------|----------|------------|-------------|---------------|----------|------------------|------------------------------|----------------------------|---------------------|---------------------------|------------------------|----------------------|--------------|---------------|-------------|-------------|--------------|-------------------------|--------------|-------------|--------------|-------------------------|-----------------------|--------------------------|--|-------------|----------------|-------------------------|----------------------|----------------------------|------------|-------------|------------|------------|------------|--------------|------------------|-------------|---------------------------------------|--------------|------------|-------------------------------|--------------|-------------|----------------------|--------------|---------------|--------------------------|
| SPI/I2S         | N/A            | N/A      | N/A        | N/A SP      | PI2_NSS A     | I/A      | N/A              | N/A                          | N/A                        | SPI1_<br>SPI3_      | MOSI SPIS                 | 1_MISO<br>3_MISO       | SPI1_SCK<br>SPI3_SCK | N/A          | N/A N/A       | A SPI2.     | _MOSI SP    | PI2_MISO     | N/A                     | SPI2_SCK SPI | 12_NSS SPI3 | 3_MOSI SPI3  | B_MISO SP               | I3_SCK SP             | II_NSS<br>II_NSS N/A     | /A N/A                                       | N/A         | N/A            | N/A                     | N/A                  | N/A                        | N/A        | N/A         | N/A        | N/A        | N/A        | N/A          | N/A N            | N/A N/A     | /A N/A                                | N/A          | N/         | /A N/A                        | N/A          | N/A         | SPI2_MOSI            | SPI2_MISO    | SPI2_SCK      | SPI2_NS                  |
| USART           | N/A            | N/A      | N/A        | N/A         | N/A N         | I/A      | N/A              | USART1_RX<br>UART4_CTS       | USART1_                    | _TX USART           | T1_CK USAF<br>5_CTS UARTS | RT1_CTS<br>5_RTS_DE US | ART1_RTS_DE          | JSART2_CK US | ART2_RX USART | 2_TX USART2 | RETS_DE USA | ART2_CTS USA | ART3_RTS_DE<br>UART5_RX | N/A          | N/A USAI    | RT3_CK USAF  | RT3_RX USA<br>RT4_RX UA | RT3_TX<br>RT4_TX UART | 4_RTS_DE N/A             | /A N/A                                       | N/A         | N/A            | N/A                     | USART1_RTS_DE        | USART1_CTS                 | USART1_RX  | USART1_TX   | USART1_CK  | N/A        | N/A        | N/A          | N/A N            | V/A N/A     | /A N/A                                | USART3_RTS   | S_DE USART | 3_CTS USART3                  | _CK USART3_F | RX USART3_T | TX N/A               | USART3_RTS_E | DE USART3_CTS | S USART3_<br>S LPUART1_R |
| USB/CAN/PD      | N/A            | N/A      | N/A        | N/A CA      | AN1_TX CAN    | 1_RX     | N/A              | N/A                          | N/A                        | N/                  | ⁄A                        | N/A                    | N/A                  | N/A          | N/A N/        | Α Λ         | I/A         | N/A          | N/A                     | CAN1_TX CAN  | N1_RX       | N/A I        | N/A                     | N/A                   | N/A N/A                  | /A N/A                                       | N/A         | N/A C          | OTG_FS_NOE              | CAN1_TX<br>OTG_FS_DP | CAN1_RX<br>OTG_FS_DM       | OTG_FS_ID  | OTG_FS_VBUS | OTG_FS_SOF | OTG_FS_NOE | N/A        | N/A          | N/A N            | V/A N/A     | /A N/A                                | N/A          | N/         | /A N/A                        | N/A          | N/A         | N/A                  | N/A          | N/A           | N/A                      |
| ADC/DAC<br>FSMC | N/A            | N/A      | N/A        | N/A         | N/A N         | I/A      | N/A              | N/A                          | N/A                        | N/                  | /A                        | N/A                    | N/A                  | N/A          | N/A N/A       | ۸ N         | I/A         | N/A          | N/A                     | N/A          | N/A         | N/A I        | N/A                     | N/A                   | N/A N/A                  | /A N/A                                       | N/A         | N/A            | N/A                     | N/A                  | N/A                        | N/A        | N/A         | N/A        | N/A        | N/A        | N/A          | N/A N            | V/A N/A     | /A N/A                                | N/A          | N/         | /A N/A                        | N/A          | N/A         | N/A                  | N/A          | N/A           | N/A                      |
| FSMC            | N/A            | N/A F    | MC_NBL1 FI | MC_NBL0     | N/A N         | I/A      | N/A              | FMC_NL                       | N/A                        | N/                  | /A                        | N/A                    | N/A                  | FMC_NE1 FM   | C_NWAIT FMC_  | NWE FMC     | _NOE FN     | MC_CLK       | N/A                     | FMC_D3 FM    | AC_D2       | N/A I        | N/A                     | N/A                   | N/A N/A                  | /A N/A                                       | N/A         | N/A            | N/A                     | N/A                  | N/A                        | N/A        | N/A         | N/A        | N/A        | N/A        | N/A          | N/A FM           | C_D1 FMC.   | _D0 FMC_A18                           | FMC_A17      | 7 FMC.     | _A16 FMC_D                    | 15 FMC_D1    | 4 FMC_D13   | 3 <i>N/A</i>         | N/A          | N/A           | N/A                      |
|                 |                |          | Т          | IM4_ETR TIM | M4_CH4 TIM4   | -CH3     |                  | LPTIM1_IN2<br>TIM4_CH2       | LPTIM1_E<br>TIM4_CF        | ETR<br>H1 LPTIM     | 1_IN1 TIM                 | 13_CH1                 |                      |              |               |             |             |              |                         |              |             |              |                         | TIN                   | И2_CH1                   |  |             |                |                         |                      | TIM1_CH4                   | TIM1_CH3   | TIM1_CH2    | TIM1_CH1   | TIM8_BKIN2 | TIM3_CH3   | TIM3_CH2     | TIM3_CH1         |             | TIM4_CH2                              | 2 TIM4_CH1   | 11         |                               |              |             | TIM1_CH3N            | TIM1_CH2N    | TIM1_CH1N     | TIM1_Bk                  |
| Timers          | N/A            | N/A T    | M17_CH1    | M16_CH1 TIM | 117_CH1 TIM16 | 6_CH1    | N/A              | TIM8_BKIN<br>TIM8_BKIN_COMP1 | TIM8_BKI<br>1 TIM8_BKIN2_0 | IN2<br>.COMP2 TIM3. | _CH2 TIM1                 | 17_BKIN                | TIM2_CH2             | N/A          | N/A N/A       | Α   Λ       | I/A         | N/A T        | TIM3_ETR                | N/A I        | N/A I       | N/A I        | N/A                     | N/A TIN               | N/A<br>M2_ETR            | /A N/A                                       | N/A         | N/A            | N/A                     | TIM1_ETR             | TIM1_BKIN2 TIM1_BKIN2_COME | TIM17_BKIN | TIM15_BKIN  | LPTIM2_OUT | TIM3_CH4   | TIM8_CH3   | TIM8_CH2     | TIM4<br>TIM8_CH1 | 4_CH4 TIM4_ | _CH3<br>LPTIM2_OU                     | UT LPTIM2_IN | LPTIM:     | 2_ETR N/A                     | N/A          | N/A         | TIM8_CH3N            | TIM8_CH2N    | TIM15_CH1N    | TIM1_BKIN_C              |
| Comparators     | N/A            | N/A      | N/A        | N/A         | N/A N         | I/A      | N/A              | COMP2 INM                    | COMP2 I                    | INP COMP            | 2 OLIT COM                | MP2 INP (              | COMP2 INM            | N/A          | N/A N/        | Δ Λ         | I/A         | N/A          | N/A                     | N/A          | N/A         | N/A I        | N/A                     | N/A                   | N/A N/A                  | /A N/A                                       | N/A         | N/A            | N/A                     | N/A                  | N/A                        | N/A        | N/A         | N/A        | N/A        | N/A        | N/A          | N/A N            | J/A N/      | /A N/A                                | N/A          | N          | /A N/A                        | N/A          | N/A         | N/A                  | N/A          | N/A           | N/A                      |
| Op-Amps         | N/A            | N/A      | Λ//Δ       | N/A         | Ν/Α Λ         | //Δ      | Ν/Δ              | N/Δ                          | N/A                        | N/                  | / <u>A</u>                | Λ//Δ                   | N/A                  | Λ//Δ         | Ν/Δ Ν/        | Δ Λ         | //Δ         | Ν/Δ          | ΛΙ/Δ                    | Λ//Δ         | Ν/Δ         | N/A          | N/A                     | Λ//Δ                  | $N/\Delta$ $N/\Delta$    | $\frac{1}{\Delta}$ $\frac{N/\Delta}{\Delta}$ | N/A         | Λ//Δ           | N/A                     | N/A                  | Λ//Δ                       | Ν/Α        | N/A         | N/A        | N/A        | N/A        | Λ//Δ         | Ν/Δ Λ            | //Δ ///Δ    | $\frac{1}{\Delta}$ $\frac{1}{\Delta}$ | Ν/Δ          | N/         | $\Lambda$ $\Lambda$ $\Lambda$ | N/A          | N/A         | N/A                  | Ν/Α          | N/A           | Ν/Δ                      |
| Other           | Voltage supply | y Ground | N/A        | N/A IF      | R_OUT A       | I/A Boot | nt memory select | TSC_G2_IO4 PVD_IN            | TSC_G2_I                   | .lO3 TSC_G          | 32_102 NJ<br>TSC_         | ITRST<br>_G2_IO1       | JTDO<br>TRACESWO     | N/A          | N/A N/A       | A ^         | I/A         | N/A T        | TSC_SYNC                | N/A          | N/A TSC_    | _G3_IO4 TSC_ | _G3_IO3 TSC             | G_G3_IO2 TSC          | JTDI JTC<br>C_G3_IO1 SWC | CK Voltage sup                               | pply Ground | Voltage supply | JTMS<br>SWDIO<br>IR_OUT | N/A                  | N/A                        | N/A        | N/A         | MCO        | TSC_G4_IO4 | TSC_G4_IO3 | TSC_G4_IO2 T | SC_G4_IO1 /      | V/A N/A     | /A TSC_G6_IC                          | O4 TSC_G6_IC | O3 TSC_G   | G6_IO2 TSC_G6.                | IO1 N/A      | N/A         | RTC_REFIN TSC_G1_IO4 | TSC_G1_IO3   | TSC_G1_IO2    | TSC_G1_                  |
| Pin Name        | VDD            | vss      | PE1        | PE0         | PB9 PI        | B8       | воото            | PB7                          | PB6                        | РВ                  | 35 F                      | PB4                    | PB3                  | PD7          | PD6 PD        | 5 P         | D4          | PD3          | PD2                     | PD1 F        | PDO P       | PC12 P       | C11 I                   | PC10 F                | PA15 PA1                 | 14 VDD                                       | VSS         | VDDUSB         | PA13                    | PA12                 | PA11                       | PA10       | PA9         | PA8        | PC9        | PC8        | PC7          | PC6 PI           | D15 PD1     | 14 PD13                               | PD12         | PD         | 11 PD10                       | PD9          | PD8         | PB15                 | PB14         | PB13          | PB12                     |
| Pin #           | 100            | 99       | 98         | 97          | 96 9          | 5        | 94               | 93                           | 92                         | 91                  | 1                         | 90                     | 89                   | 88           | 87 86         | 6           | 35          | 84           | 83                      | 82           | 81          | 80           | 79                      | 78                    | 77 76                    | 6 75   | 74          | 73             | 72                      | 71                   | 70                         | 69         | 68          | 67         | 66         | 65         | 64           | 63               | 62 61       | 1 60                                  | 59           | 58         | 57                            | 56           | 55          | 54                   | 53           | 52            | 51                       |