

L5 PRN CODE ASSIGNMENTS

| PRN Code Number | XB Code Advance (Chips) ⁱ | | Initial XB Code State (Octal) ⁱⁱ | | PRN Allocations System (Satellite) | Orbital Slot | Effective Through (Month Year) |
|---|--------------------------------------|------|---|-------|--|--------------------------|--------------------------------|
| | I5 | Q5 | I5 | Q5 | | | |
| 1-63 | See IS-GPS-705 ⁱⁱⁱ | | See IS-GPS-705 ⁱⁱⁱ | | Reserved for GPS | See NAVCEN ^{iv} | See NAVCEN ^{iv} |
| 64-119 | See IS-GPS-705 ⁱⁱⁱ | | See IS-GPS-705 ⁱⁱⁱ | | Reserved for other augmentation systems | N/A | N/A |
| 120-158 | See Below | | See Below | | Reserved for SBAS | See Below | See Below |
| 159-210 | See Below | | See Below | | Reserved for other GNSS & other applications | See Below | See Below |
| Reserved for Satellite-Based Augmentation System (SBAS) (PRNs 120-158) | | | | | | | |
| 120 | 2797 | 6837 | 15142 | 15131 | Unallocated | --- | --- |
| 121 | 934 | 1393 | 14314 | 2171 | EGNOS (Eutelsat 5WB) | 5 W | Apr 2024 |
| 122 | 3023 | 7383 | 10305 | 17637 | SPAN (INMARSAT 4F1) | 143.5 E | Jan 2023 |
| 123 | 3632 | 611 | 17333 | 10601 | EGNOS (ASTRA 5B) | 31.5 E | Nov 2021 |
| 124 | 1330 | 4920 | 144 | 743 | EGNOS (Reserved) | --- | Apr 2024 |
| 125 | 4909 | 5416 | 15605 | 7334 | Reserved | --- | Dec 2021 |
| 126 | 4867 | 1611 | 14102 | 5524 | EGNOS (INMARSAT 4F2) | 63.9 E | Apr 2023 |
| 127 | 1183 | 2474 | 1515 | 527 | GAGAN (GSAT-8) | 55 E | Sep 2020 |
| 128 | 3990 | 118 | 12453 | 12755 | GAGAN (GSAT-10) | 83 E | Sep 2020 |
| 129 | 6217 | 1382 | 17364 | 4202 | Reserved | --- | Sep 2029 |
| 130 | 1224 | 1092 | 17754 | 12737 | BDSBAS (G1) | 140 E | Oct 2020 |
| 131 | 1733 | 7950 | 207 | 6102 | WAAS (Eutelsat 117 West B) | 117 W | Mar 2028 |
| 132 | 2319 | 7223 | 17602 | 13032 | GAGAN (GSAT-15) | 93.5 E | Nov 2025 |
| 133 | 3928 | 1769 | 03473 | 10407 | WAAS (SES-15) | 129 W | Oct 2029 |
| 134 | 2380 | 4721 | 15425 | 11366 | KASS (MEASAT-3D) | 91.5 E | Jun 2021 |
| 135 | 841 | 1252 | 05373 | 10130 | WAAS (Intelsat Galaxy 30) | 125 W | Jul 2029 |
| 136 | 5049 | 5147 | 01433 | 00627 | EGNOS (SES-5) | 5 E | Nov 2021 |
| 137 | 7027 | 2165 | 01567 | 02553 | Reserved | --- | Sep 2029 |
| 138 | 1197 | 7897 | 16360 | 03414 | WAAS (ANIK F1R) | 107.3 W | Jul 2022 |
| 139 | 7208 | 4054 | 07437 | 04313 | Unallocated | --- | --- |
| 140 | 8000 | 3498 | 03560 | 12517 | Reserved | --- | Dec 2021 |
| 141 | 152 | 6571 | 17110 | 04105 | Reserved | --- | Dec 2021 |
| 142 | 6762 | 2858 | 01562 | 00174 | Unallocated | --- | --- |
| 143 | 3745 | 8126 | 05474 | 15167 | BDSBAS (G3) | 110.5 E | Oct 2020 |

Changes shown in **bold***Please refer to IS-GPS-705 for published values*

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|---|--------------------------------------|------|---|-------|------------------------------------|--------------|--------------------------------|
| | I5 | Q5 | I5 | Q5 | | | |
| 144 | 4723 | 7017 | 02275 | 16761 | BDSBAS (G2) | 80 E | Oct 2020 |
| 145 | 5502 | 1901 | 15663 | 16721 | Unallocated | --- | --- |
| 146 | 4796 | 181 | 03637 | 01263 | Unallocated | --- | --- |
| 147 | 123 | 1114 | 11257 | 07705 | NSAS (NIGCOMSAT-1R) | 42.5 E | Jan 2021 |
| 148 | 8142 | 5195 | 07757 | 04234 | ASAL (ALCOMSAT-1) | 24.8 W | Jan 2021 |
| 149 | 5091 | 7479 | 00441 | 16023 | Unallocated | --- | --- |
| 150 | 7875 | 4186 | 16153 | 06250 | Unallocated | --- | --- |
| 151 | 330 | 3904 | 17221 | 00404 | Unallocated | --- | --- |
| 152 | 5272 | 7128 | 13275 | 04453 | Unallocated | --- | --- |
| 153 | 4912 | 1396 | 01560 | 10217 | Unallocated | --- | --- |
| 154 | 374 | 4513 | 00274 | 16502 | Unallocated | --- | --- |
| 155 | 2045 | 5967 | 04574 | 16073 | Unallocated | --- | --- |
| 156 | 6616 | 2580 | 16672 | 16622 | Unallocated | --- | --- |
| 157 | 6321 | 2575 | 15653 | 11110 | Unallocated | --- | --- |
| 158 | 7605 | 7961 | 15061 | 03415 | Unallocated | --- | --- |
| Other Global Navigation Satellite Systems (GNSS) & Other Applications (PRNs 159 – 210) | | | | | | | |
| 159 | 2570 | 2598 | 04424 | 00756 | Unallocated | --- | --- |
| 160 | 2419 | 4508 | 16431 | 04114 | Unallocated | --- | --- |
| 161 | 1234 | 2090 | 15047 | 02736 | Unallocated | --- | --- |
| 162 | 1922 | 3685 | 05567 | 06332 | Unallocated | --- | --- |
| 163 | 4317 | 7748 | 02720 | 15302 | Unallocated | --- | --- |
| 164 | 5110 | 684 | 00730 | 14215 | Unallocated | --- | --- |
| 165 | 825 | 913 | 11673 | 12731 | Unallocated | --- | --- |
| 166 | 958 | 5558 | 06437 | 04112 | Unallocated | --- | --- |
| 167 | 1089 | 2894 | 07374 | 07072 | Unallocated | --- | --- |
| 168 | 7813 | 5858 | 12232 | 00060 | Unallocated | --- | --- |
| 169 | 6058 | 6432 | 02326 | 14574 | Unallocated | --- | --- |
| 170 | 7703 | 3813 | 07463 | 01447 | Unallocated | --- | --- |
| 171 | 6702 | 3573 | 00333 | 03271 | Unallocated | --- | --- |
| 172 | 1714 | 7523 | 11232 | 01034 | Unallocated | --- | --- |
| 173 | 6371 | 5280 | 15257 | 14526 | Unallocated | --- | --- |
| 174 | 2281 | 3376 | 16712 | 15622 | Unallocated | --- | --- |

Changes shown in **bold**
Please refer to IS-GPS-705 for published values

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|-----------------|--------------------------------------|------|---|-------|------------------------------------|-----------------|--------------------------------|
| | I5 | Q5 | I5 | Q5 | | | |
| 175 | 1986 | 7424 | 02366 | 17771 | Unallocated | --- | --- |
| 176 | 6282 | 2918 | 03651 | 06012 | Unallocated | --- | --- |
| 177 | 3201 | 5792 | 17207 | 04512 | Unallocated | --- | --- |
| 178 | 3760 | 1747 | 02224 | 17644 | Unallocated | --- | --- |
| 179 | 1056 | 7079 | 04562 | 14253 | Unallocated | --- | --- |
| 180 | 6233 | 2921 | 15660 | 14601 | Unallocated | --- | --- |
| 181 | 1150 | 2490 | 10773 | 07732 | Unallocated | --- | --- |
| 182 | 2823 | 4119 | 05560 | 07035 | Unallocated | --- | --- |
| 183 | 6250 | 3373 | 01653 | 16226 | Reserved | --- | Aug 2025 |
| 184 | 645 | 977 | 17042 | 03770 | Reserved | --- | Aug 2025 |
| 185 | 2401 | 681 | 05103 | 02155 | Reserved | --- | Aug 2025 |
| 186 | 1639 | 4273 | 03574 | 01463 | Reserved | --- | Aug 2025 |
| 187 | 2946 | 5419 | 13272 | 04733 | Reserved | --- | Aug 2025 |
| 188 | 7091 | 5626 | 00123 | 06705 | Reserved | --- | Aug 2025 |
| 189 | 923 | 1266 | 02375 | 15343 | Reserved | --- | Aug 2025 |
| 190 | 7045 | 5804 | 17430 | 11661 | Reserved | --- | Aug 2025 |
| 191 | 6493 | 2414 | 15554 | 01466 | Reserved | --- | Aug 2025 |
| 192 | 1706 | 6444 | 15226 | 15527 | Reserved | --- | Aug 2025 |
| 193 | 5836 | 4757 | 06056 | 11607 | QZSS (QZS-1) | A1 ^v | Aug 2025 |
| 194 | 926 | 427 | 06237 | 06472 | QZSS (Reserved) | --- | Aug 2025 |
| 195 | 6086 | 5452 | 10714 | 06146 | QZSS (Reserved) | --- | Aug 2025 |
| 196 | 950 | 5182 | 17561 | 00414 | QZSS (Reserved) | --- | Aug 2025 |
| 197 | 5905 | 6606 | 03741 | 05055 | QZSS (Reserved) | --- | Aug 2025 |
| 198 | 3240 | 6531 | 00161 | 10127 | QZSS (Reserved) | --- | Aug 2025 |
| 199 | 6675 | 4268 | 12644 | 03161 | QZSS (Reserved) | --- | Aug 2025 |
| 200 | 3197 | 3115 | 04166 | 04346 | QZSS (Reserved) | --- | Aug 2025 |
| 201 | 1555 | 6835 | 07643 | 04545 | QZSS (Reserved) | --- | Aug 2025 |
| 202 | 3589 | 862 | 01713 | 16127 | QZSS (Reserved) | --- | Aug 2025 |
| 203 | 4555 | 4856 | 12433 | 12664 | Unallocated | --- | --- |
| 204 | 5671 | 2765 | 11563 | 17550 | Unallocated | --- | --- |
| 205 | 6948 | 37 | 02701 | 10164 | Unallocated | --- | --- |
| 206 | 4664 | 1943 | 15417 | 10254 | Unallocated | --- | --- |
| 207 | 2086 | 7977 | 16751 | 14115 | Unallocated | --- | --- |
| 208 | 5950 | 2512 | 06655 | 17703 | Unallocated | --- | --- |

Changes shown in **bold***Please refer to IS-GPS-705 for published values*

L5 PRN CODE ASSIGNMENTS

| PRN Code Number | XB Code Advance (Chips) ⁱ | | Initial XB Code State (Octal) ⁱⁱ | | PRN Allocations System (Satellite) | Orbital Slot | Effective Through (Month Year) |
|-----------------|--------------------------------------|------|---|-------|------------------------------------|--------------|--------------------------------|
| | I5 | Q5 | I5 | Q5 | | | |
| 209 | 5521 | 4451 | 07662 | 01363 | Unallocated | --- | --- |
| 210 | 1515 | 4071 | 10567 | 11041 | Unallocated | --- | --- |

Definitions:

"Unallocated" – This PRN number has not been assigned to a system provider for any signal (L1 C/A, L1C, L2C, or L5)

"Reserved" – This PRN number has been assigned to a system provider for a different signal (L1 C/A, L1C or L2C). Therefore the PRN number for this signal is unassigned but held in reserve.

"SYSTEM (Reserved)" – The system provider has been assigned the PRN for this signal, but the broadcasting satellite is not specified

Abbreviations:

ASAL – Algerian Space Agency

SPAN – Southern Positioning Augmentation Network (AUS-NZ)

BDSBAS – BeiDou Satellite-Based Augmentation System

EGNOS – European Geostationary Navigation Overlay Service

GAGAN – GPS-Aided Geo-Augmented Navigation

GBAS – Ground-Based Augmentation System

KASS – Korean Augmentation Satellite System

MSAS – Michibiki Satellite Augmentation System

NSAS – Nigerian Satellite Augmentation System

PRN – Pseudorandom Noise

QZSS – Quazi-Zenith Satellite System

SDCM – System of Differential Correction and Monitoring

WAAS – Wide Area Augmentation System

ⁱ XB Code Advance is the number of XB clock cycles beyond an initial state of all 1s.

ⁱⁱ In the Octal notation for the first 13 chips of the I5 and Q5 XB codes as shown in these columns, the rightmost bit is the first bit out. Since the initial state of the XA Code is all 1s, these first 13 chips are also the complement of the initial states of the I5 or Q5-codes. In the Octal notation for the first 13 chips, the first digit (1/0) represents the first chip and the last four digits are the conventional Octal representation of the remaining 12 chips.

ⁱⁱⁱ For further information see the latest edition of IS-GPS-705 at <http://www.gps.gov/technical/icwg/>.

^{iv} For current PRN assignments and orbital information for GPS satellites please see the Navigation Center website at <http://www.navcen.uscg.gov/?Do=constellationStatus>.

^v QZSS A1: RAAN = 0, Argument of Perigee = 270, Mean Anomaly = 324, at Epoch 31Dec 07 00:00:00.