L5 PRN CODE ASSIGNMENTS

PRN Signal Number	XB Code Advance (Chips)[i]		Initial XB Code State (Octal)[ii]		PRN Allocations System (Satellite)	Orbital Slot	Effective Date
	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	EGNOS (INMARSAT-3 F2)	15.5 W	**Active through Apr 2020**
121	934	1393	14314	2171	EGNOS (INMARSAT-3 F5)	25 E	Active through Apr 2024
122	**3023**	**7383**	**10305**	**17637**	**AUS-NZ (INMARSAT-4 F1)**	**143.5 E**	**Active through Jan 2020**
123	3632	611	17333	10601	EGNOS (ASTRA 5B)	31.5 E	Active through Nov 2021
124	1330	4920	144	743	EGNOS (Eutelsat 5WB)	5 W	Active through Apr 2024
125	4909	5416	15605	7334	SDCM (Luch-5A)	16 W	Active through Dec 2021
126	**4867**	**1611**	**14104**	**5524**	**EGNOS (INMARSAT-4 F2)**	**63.9 E**	**Active through Apr 2023**
127	1183	2474	1515	527	GAGAN (GSAT-8)	55 E	Active through Sep 2020
128	3990	118	12453	12755	GAGAN (GSAT-10)	83 E	Active through Sep 2020
129	6217	1382	17364	4202	MSAS (MTSAT-2)[v]	145 E	Active through Jan 2020
130	1224	1092	17754	12737	BDSBAS (G6)	80 E	Active through Oct 2020
131	1733	7950	207	6102	WAAS (Eutelsat 117 West B)	117 W	Active through Mar 2028
132	2319	7223	17602	13032	GAGAN (GSAT-15)	93.5 E	Active through Nov 2025
133	3928	1769	03473	10407	WAAS **(SES-15)**	**129 W**	Active through Oct 2029
134	2380	4721	15425	11366	**KASS (INMARSAT-3 F5)**	178 E	Active through Jun 2021
135	841	1252	05373	10130	WAAS (Intelsat Galaxy-15)	133 W	Active through Jul 2019
136	5049	5147	01433	00627	EGNOS (ASTRA 4B)	5 E	Active through Nov 2021
137	7027	2165	01567	02553	MSAS (MTSAT-2)[v]	145 E	Active through Jan 2020
138	1197	7897	16360	03414	WAAS (ANIK F1R)	107.3 W	Active through Jul 2022
139	7208	4054	07437	04313	Unallocated	---	
140	8000	3498	03560	12517	SDCM (Luch-5B)	95 E	Active through Dec 2021
141	152	6571	17110	04105	SDCM (Luch-4)	167 E	Active through Dec 2021
142	6762	2858	01562	00174	Unallocated	---	
143	3745	8126	05474	15167	BDSBAS (G3)	110.5 E	Active through Oct 2020

L5 PRN CODE ASSIGNMENTS

PRN Signal Number	XB Code Advance (Chips)[i]		Initial XB Code State (Octal)[ii]		PRN Allocations System (Satellite)	Orbital Slot	Effective Date
	I5	Q5	I5	Q5			
144	4723	7017	02275	16761	BDSBAS (G1)	140 E	Active through 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	Active through Oct 2019
148	8142	5195	07757	04234	**ASAL (ALCOMSAT-1)**	**24.8 W**	**Active through Jan 2020**
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	**WAAS (SES-15)**	**129 W**	**Active through Sep 2019**
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	---	---

L5 PRN CODE ASSIGNMENTS

PRN Signal Number	XB Code Advance (Chips)[i]		Initial XB Code State (Octal)[ii]		PRN Allocations System (Satellite)	Orbital Slot	Effective Date
	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	Unallocated	---	---
184	645	977	17042	03770	Unallocated	---	---
185	2401	681	05103	02155	Unallocated	---	---
186	1639	4273	03574	01463	Unallocated	---	---
187	2946	5419	13272	04733	Unallocated	---	---
188	7091	5626	00123	06705	Unallocated	---	---
189	923	1266	02375	15343	Unallocated	---	---
190	7045	5804	17430	11661	Unallocated	---	---
191	6493	2414	15554	01466	Unallocated	---	---
192	1706	6444	15226	15527	Unallocated	---	---
193	5836	4757	06056	11607	QZS1	A1[vii]	Aug 2025
194	926	427	06237	06472	QZSS (Reserved)	TBD	Aug 2025
195	6086	5452	10714	06146	QZSS (Reserved)	TBD	Aug 2025
196	950	5182	17561	00414	QZSS (Reserved)	TBD	Aug 2025
197	5905	6606	03741	05055	QZSS (Reserved)	TBD	Aug 2025
198	3240	6531	00161	10127	QZSS (Reserved)	TBD	Aug 2025
199	6675	4268	12644	03161	QZSS (Reserved)	TBD	Aug 2025
200	3197	3115	04166	04346	QZSS (Reserved)	TBD	Aug 2025
201	1555	6835	07643	04545	QZSS (Reserved)	TBD	Aug 2025
202	3589	862	01713	16127	QZSS (Reserved)	TBD	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	---	---

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

Abbreviations:

EGNOS – European Geostationary Navigation Overlay Service
GNSS - Global Navigation Satellite Systems
PRN – Pseudorandom Noise
SDCM – System of Differential Correction and Monitoring
NSAS – Nigerian Satellite Augmentation System
GAGAN – GPS-Aided Geo-Augmented Navigation
MSAS – MTSAT Space-Based Augmentation System
QZSS – Quazi-Zenith Satellite System
TBD – To Be Determined
KASS – Korean Augmentation Satellite 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-200 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] MTSAT-2 will broadcast two PRN signals-each of which is received from an independent uplink station-in order to maintain continuity in case of uplink signal failure.
[vi] This PRN is reserved for the requesting system pending final approval as of publication of this document.
[vii] QZSS A1 => RAAN = 0, Argument of Perigee = 270, Mean Anomaly = 324, at Epoch 31Dec 07 00:00:00.