

4G MARKET and TECHNOLOGY UPDATE

APT700 band global status

Industry support for the APT700 band plan is strong. Whereas APT700 provides both FDD and TDD arrangements, it is the FDD plan that has gained global support from industry and regulators in markets addressing approaching 4 billion people. The FDD configuration is standardised by 3GPP (band 28) for a 2 x 45 MHz arrangement, with 10 MHz guardband between downlink and uplink.

APT700 FDD band plan (3GPP Band 28)

- 703-748 MHz for the uplink
- 10 MHz guard band
- 758-803 MHz for the downlink

Telstra, GSA and the GSMA jointly promote APT700 spectrum allocations for LTE to explain the benefits and opportunities from its use. The main infrastructure systems providers including Alcatel-Lucent, Ericsson, Huawei and Nokia support APT700. 700 MHz is excellent for wide area coverage in regional and rural environments, and for in-building coverage, and is an important digital dividend arising from the shift by TV broadcasters to digital transmissions. Adoption of the APT700 FDD band plan by many countries has created a major opportunity for near global spectrum harmonization for LTE, ensuring the greatest economies of scale for user devices, capacity for mobile broadband, and roaming. 43 countries and territories allocated, committed to, or recommend APT700 FDD (band 28) for LTE system deployments:

LAC region: Argentina, Brazil, Chile, Colombia, Costa Rica, Curaçao, Dominican Republic, Ecuador, Honduras, Mexico, Panama, Peru, Venezuela

APAC/Oceania: Afghanistan, Australia, Bangladesh, Bhutan, Brunei, Cambodia, Fiji, India, Indonesia, Japan, Laos, Malaysia, Myanmar, Nepal, New Zealand, Pakistan, Papua New Guinea, Singapore, South Korea, St. Maarten, Taiwan, Thailand, Tonga, Vanuatu, Vietnam

Middle East: UAE confirmed adoption of the APT700 lower 2 x 30 MHz duplexer. This is also the preferred frequency arrangement for 700 MHz allocations in Europe and throughout ITU Region 1

Europe: Finland, France, Germany, Sweden, and UK

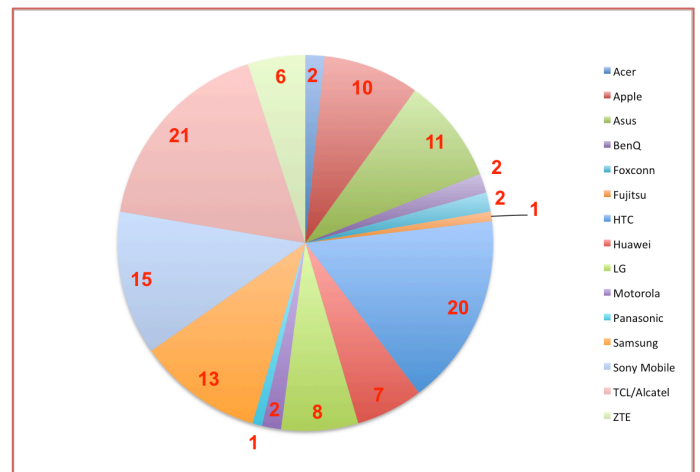
APT700 band 28 is licensed to mobile operators in 13 countries: Argentina, Australia, Brazil, Chile, Ecuador, Fiji,

Japan, Mexico, New Zealand, Panama, Papua New Guinea, South Korea, and Taiwan

12 commercially launched APT700 b28 operators

APT700 Network	Country	Launched
Digicel	Papua New Guinea	26.03.14
FarEasTone	Taiwan	03.06.14
Taiwan Mobile	Taiwan	04.06.14
Vodafone	New Zealand	18.07.14
Optus	Australia	23.07.14
Telstra	Australia	25.07.14
Spark	New Zealand	28.08.14
Asia Pacific Telecom	Taiwan	24.12.14
C and W	Panama	11.03.15
Movistar	Panama	27.03.15
Ambit Microsystems	Taiwan	15.05.15
Claro	Panama	06.08.15

214 APT700 (band 28) user devices are launched by key suppliers including Acer, Apple, Asus, Foxconn/InFocus, Fujitsu, HTC, Huawei, LG, Motorola, Samsung, Sierra Wireless, Sony, TCL/Alcatel, and ZTE. (Status of the LTE Ecosystem report, November 2, 2015). 121 devices are smartphones:



121 APT700 band 28 smartphones by vendor

Detailed analysis of all announced APT700 devices as verified by GSA is available using GSA's **GAMBoD** tool.

Access restrictions apply – see www.gsacom.com/gambod



APT700 band LINKEDIN group:
<http://www.linkedin.com/groups?gid=4759091>