HEXAGON 680 DSP
Extra horsepower and efficiency for sensor and imaging use cases.

THE QUALCOMM® SNAPDRAGON™ 820 PROCESSOR
IMMERSIVE AND INTELLIGENT.
Introducing the new all-in-one Snapdragon 820—the most powerful mobile processor Qualcomm Technologies has ever created. And with Hexagon 680 DSP built in, you get our most advanced and efficient photography and sensor-based experiences. Purpose-built to redefine efficiency, innovation and the user experience, the Snapdragon 820 offers a whole new level of mobile intelligence.

SPECIALIZED PROCESSING
DSPs speed up multimedia, computer vision, and context processing while saving power.
• Snapdragon 820 includes two DSPs:
  - Hexagon 680
  - Snapdragon Sensor Core

NEXT GENERATION ARCHITECTURE
Addition of wide vector support offers increased support and higher performance.
• HVX (Hexagon Vector Extensions) add support for advanced programmable use cases in imaging and computer vision when paired with the Snapdragon Spectra camera ISP.
• Can be used to adaptively brighten areas of videos faster and at 10% the power required of previous generations.

DEDICATED SENSOR PROCESSOR
Snapdragon Sensor Core is directly integrated into the 820 chip.
• Built on the Hexagon architecture.
• Lower power island for always on use cases.
• Benefits step/activity counters as well as sensor-assisted positioning, where a phone’s sensors provide accurate location in the absence of a strong GPS signal.

Qualcomm Hexagon, Qualcomm Snapdragon and Qualcomm Spectra are products of Qualcomm Technologies, Inc.
©2015 Qualcomm Technologies, Inc. All Rights Reserved. Qualcomm, Snapdragon and Hexagon are trademarks of Qualcomm Incorporated, registered in the United States and other countries. Qualcomm Spectra is a trademark of Qualcomm Incorporated.