Written by Marco Attard 13 March 2019

According to DigiTimes Research Intel CPU shortages are set to get worse in Q1 2019, as demand for Chromebooks equipped with entry-level Intel processors enters the "high period."



The analyst predicts the Intel CPU supply gap will shrink to 2-3% in Q1 2019, with Core i3 taking over Core i5 as the series hit hardest by shortages. The shortages started in April 2018, with major brands including HP, Dell and Lenovo experiencing supply gaps of over 5%. Analysts previously believed shortages would gradually ease after vendors completed inventory preparations for the holiday season, but the Q4 2018 supply gap remained at the same levels as Q3 2018. This is due to HP launching a second wave of CPU inventory buildup in Q4 2018, prompting other vendors to follow suit.

Taiwan-based vendors were unprepared, and saw supply gaps expand from a single-digit percentage to over 10% in Q4 2018. With all the impacts, the notebook market continued suffering a 4-5% supply gap in Q4 2018. The Core i5 series used mainly in mainstream models sees the most serious shortages in H2 2018, followed by the entry-level Atom, Celeron and Pentium series.

DigiTimes says Lenovo had a supply gap of "hundreds of thousands" CPUs in H2 2018, while the latest MacBook Air (released October 2018 and based exclusively on the Intel 14nm Amber Lake processor) is also reportedly a victim of CPU shortages. Meanwhile white-box players in China have been denied any supply of entry-level Intel processors since September 2018.

Moving to Q1 2019, Coffee Lake-based Core i5 processors have the worst supply shortfall, leading vendors to turn to AMD. Others are opting for Core i3 processors, leading to tight supply in the market. Either way, the Intel CPU supply gap is expected to grow 1-2% Q-o-Q in Q2 2019, with overall shipments unlikely to see growth.

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In the meantime, AMD should see growth in global notebook shipment share-- from 9.8% in Q1 2018 to 15.8% in Q1 2019. More Chromebooks are expected to ship with AMD processors in Q2 2019, and many vendors should mass ship AMD-based entry-level notebooks, bringing about AMD notebook share of 18% in Q2 2019.

Will Intel resolve the shortage problem? It should once it manages to expand 14nm capacity in H2 2019. DigiTimes also says Intel is seeing issues with 10nm mass production, and might skip 10nm to go straight to 7nm process development.

Go Intel CPU Shortages to Worsen in 2Q19, Says DigiTimes Research