ANALYSIS OF AGREEMENT CONTAINING CONSENT ORDERS TO AID PUBLIC COMMENT

In the Matter of NXP Semiconductors N.V., File Number 151-0090, Docket No. C-4560

INTRODUCTION

The Federal Trade Commission ("Commission") has accepted from NXP Semiconductors N.V. ("NXP"), subject to final approval, an Agreement Containing Consent Orders ("Consent Agreement") designed to remedy the anticompetitive effects resulting from NXP's proposed acquisition of Freescale Semiconductor Ltd. ("Freescale").

On March 1, 2015, NXP and Freescale executed an Agreement and Plan of Merger ("Merger Agreement") pursuant to which NXP will acquire all of Freescale's common stock in a transaction valued at approximately $11.8 billion ("Acquisition"). The proposed Acquisition would combine the two largest suppliers of RF power amplifiers. The Commission's Complaint alleges that the proposed Acquisition, if consummated, would violate Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18, and Section 5 of the FTC Act, as amended, 15 U.S.C. § 45, by substantially lessening competition in the worldwide market for RF power amplifiers.

Under the terms of the proposed Decision and Order ("Order") contained in the Consent Agreement, NXP is required, no later than ten days from the close of the NXP/Freescale transaction, to divest its RF power amplifier assets to Jianguang Asset Management Co., Ltd. ("JAC"). The divestiture package includes a manufacturing facility, manufacturing equipment, intellectual property, and customer and supplier contracts. NXP's RF power employees, including the leadership of the business, will also transfer to JAC. The Consent Agreement provides JAC with everything needed to compete effectively in the RF power amplifier market.

The Consent Agreement has been placed on the public record for 30 days to solicit comments from interested persons. Comments received during this period will become part of the public record. After 30 days, the Commission will again review the Consent Agreement and the comments received, and decide whether it should withdraw from the Consent Agreement, modify it, or make it final.

THE PARTIES

Headquartered in the Netherlands, NXP is a semiconductor developer and manufacturer specializing in high performance mixed signal devices for a variety of industries. NXP designs, manufactures, and sells RF power amplifiers, among other products, through its Secure Interface & Power division.

Headquartered in Austin, Texas, Freescale is a manufacturer of stand-alone semiconductors that perform dedicated power usage functions in a variety of electronic systems for automotive, networking, industrial, and consumer applications. Freescale designs, manufactures, and sells RF power amplifiers through its Radio Frequency division.

THE RELEVANT MARKET AND MARKET STRUCTURE

The relevant line of commerce in which to analyze the effects of the Acquisition is no broader than RF power amplifiers. RF power amplifiers (also referred to as RF power transistors) are high power (>1 watt average output power) semiconductors that increase the strength of radio signals transmitted between electronic devices. The largest application for RF power amplifiers, accounting for roughly 70% of revenues, is wireless infrastructure—i.e., cellular base stations (cell towers). Other applications include aviation, industrial, broadcasting, and non-cellular communications such as land mobile radio, as well as potential future applications for cooking and lighting. RF power transistors are manufactured using specialty process technologies in order to deliver high output power and heat dissipation. The two principal technologies are (i) silicon based laterally-diffused metal oxide semiconductor ("LDMOS") and (ii) gallium nitride on silicon carbide substrate ("GaN"). LDMOS technology accounts for roughly 90% of RF power amplifiers used in wireless infrastructure. According to customers and other market participants, there are no substitutes for RF power amplifiers.

The relevant geographic market for RF power amplifiers is worldwide. The three major RF power amplifier suppliers (see below) manufacture the products in facilities around the world, and ship the products from those facilities to customer locations worldwide. There are currently no regulatory barriers, tariffs, or technical specifications that impede worldwide trade, and transportation costs are low.

The RF power amplifier market is characterized by a limited number of suppliers, including Freescale, the largest supplier with 36.6% of the market, and NXP, the second-largest supplier with 25.1% of the market. Infineon Technologies AG ("Infineon") is the third largest supplier. Freescale, NXP, and Infineon are the only meaningful suppliers of LDMOS-based RF power amplifiers. Infineon, however, has a significantly smaller RF power portfolio than either Freescale or NXP. Several additional companies supply GaN-based RF power amplifiers only, but have small market shares.

The proposed NXP/Freescale combination would cause a moderately concentrated market for RF power amplifiers to become highly concentrated, increasing the Herfindahl-Hirschman Index from 2,203 to 4,040 (a delta of 1,837). This increase in concentration far exceeds the thresholds set out in the *Horizontal Merger Guidelines* for raising a presumption that the Acquisition would create or enhance market power.

ENTRY

Entry into the RF power amplifier market is not likely to deter or counteract any anticompetitive effects of the proposed Acquisition. Entry is unlikely in light of high capital costs, significant switching costs by customers, and the considerable time it would take for customers to develop trust in a new entrant's products. The same barriers would apply to an expansion into LDMOS-based RF power amplifiers by companies that currently supply only GaN-based RF power amplifiers.

EFFECTS OF THE ACQUISITION

Absent a divestiture, the proposed Acquisition is likely to cause competitive harm in the market for RF power amplifiers. NXP and Freescale compete directly for RF power amplifier sales, and customers benefit from that competition in terms of both pricing and product innovation. Customers describe NXP and Freescale as each other's closest competitors, and the parties appear to view each other the same way. By eliminating the competition between NXP and Freescale, the proposed Acquisition likely would lead to unilateral effects in the form of higher prices and reduced innovation, particularly in the wireless infrastructure segment.

THE CONSENT AGREEMENT

The Consent Agreement restores the competition lost from NXP's proposed acquisition of Freescale by requiring NXP to divest its RF power amplifier business to JAC, a Chinese private equity management fund. The proposed divestiture includes everything needed for JAC to compete effectively in the worldwide market for RF power amplifiers.

Under the Order, NXP is required, no later than ten days from the close of the NXP/Freescale transaction, to divest its RF power amplifier assets to JAC. The assets to be divested include a manufacturing facility located in Cabuyao (Philippines), a building in Nijmegen (the Netherlands) to house management and certain R&D and testing labs, all manufacturing and R&D assets used primarily for the RF power amplifier business, and customer support equipment. Additionally, the divestiture package includes all patents and technologies that are exclusively or predominantly used for the RF power amplifier business, and a royalty-free license to use all other NXP patents and technologies required by that business. Finally, the divestiture package includes the transition of NXP's RF power amplifier employees, including the complete management team, to JAC.

The manufacturing assets in the divestiture package include NXP's RF power amplifier back-end manufacturing assets (including the portion of the Philippines facility dedicated to these products) but not its front-end manufacturing assets. Instead, JAC will outsource its front-end manufacturing to a third-party wafer foundry. In the interim, the Order requires that, at the request of JAC and in a manner approved by the Commission, NXP must provide front-end wafer manufacturing for a period of up to sixty months. Similarly, the Order also requires NXP to provide support services such as logistical and administrative support for a period of up to thirty-six months.

In addition, the Order includes other standard terms designed to ensure the viability of the divested business. NXP must assist JAC in hiring the existing work force of NXP's RF power amplifier business, and must refrain from soliciting those employees for two years. A Monitor will oversee NXP's compliance with the obligations set forth in the Order. If NXP does not fully comply with the divestiture and requirements of the Order, the Commission may appoint a

Divestiture Trustee to divest the RF power amplifier assets and perform NXP's other obligations consistent with the Order.

Given the robustness of the divested business and the protections contained in the Order, the divestiture of NXP's RF power amplifier assets to JAC is likely to preserve competition. Potential customers have confirmed that the divested assets include everything necessary to compete effectively as a viable business. Similarly, potential customers have confirmed that JAC would be a workable option as a supplier.

OPPORTUNITY FOR PUBLIC COMMENT

The purpose of this analysis is to facilitate public comment on the Consent Agreement to aid the Commission in determining whether it should make the Consent Agreement final. This analysis is not an official interpretation of the proposed Consent Agreement and does not modify its terms in any way.