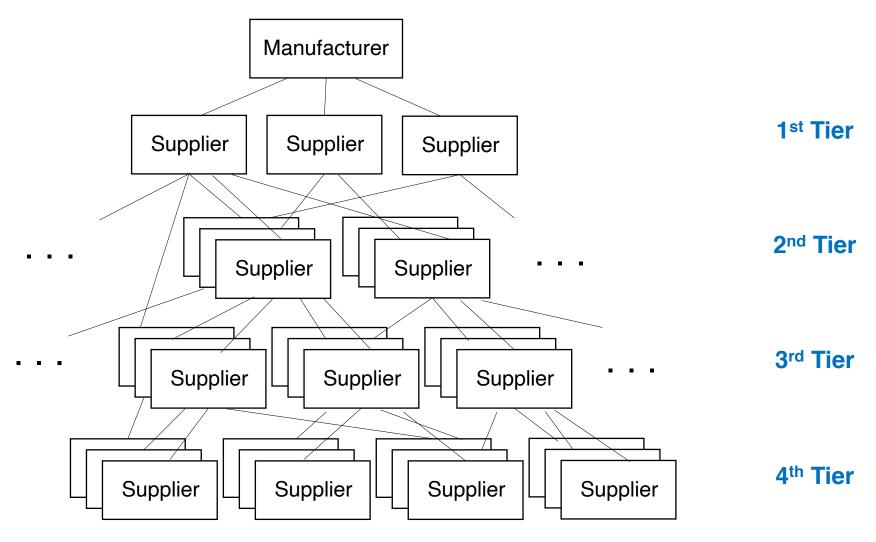
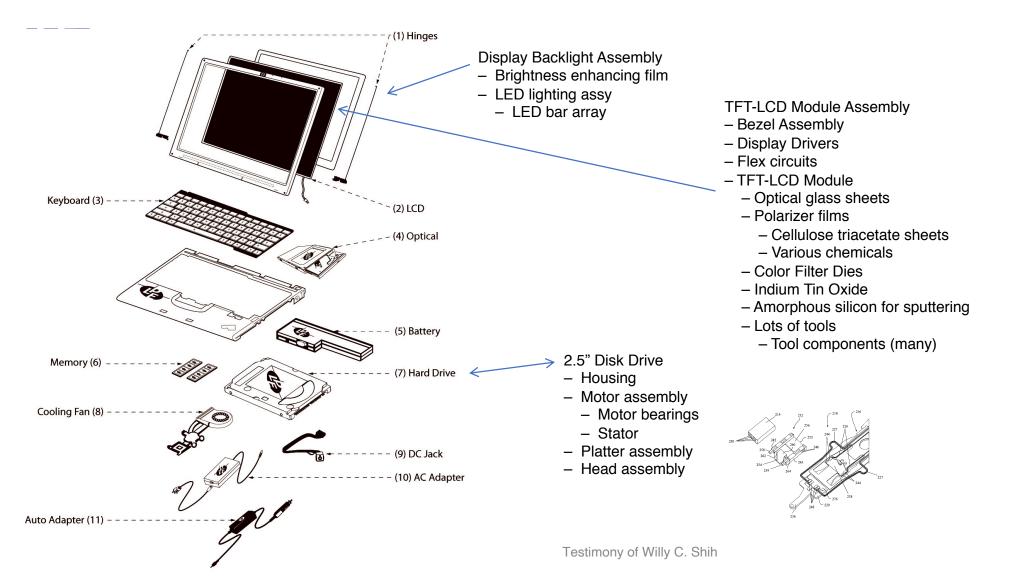
Deep Supply Chain Tiering

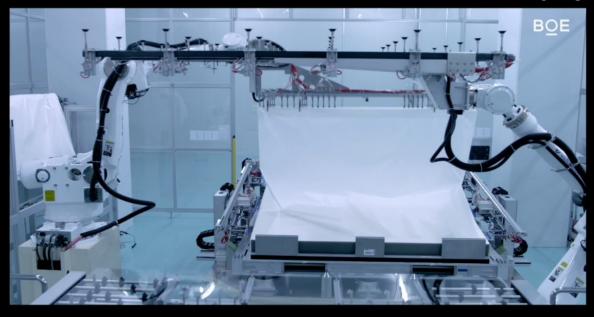


Testimony of Willy C. Shih

Specialization





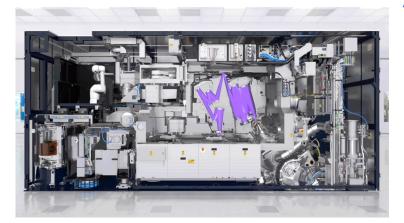






Optical Engine

ZEISS, Oberkochen, Germany



EUV Lithography Tool ASML Holding, Veldhoven,

Netherlands



EUV Light Source Cymer, San Diego, CA

Exhibit 4

Cooperative R&D

IMEC, Leuven, Belgium Albany NanoTech, Albany NY



Semiconductor Fabs

Intel, OR, AZ, Ireland, Israel TSMC, Taiwan (USA) Samsung, Korea, USA



OSATs

ASE, Taiwan Amkor USA/SE Asia JCET, China SPIL, Taiwan/SE Asia

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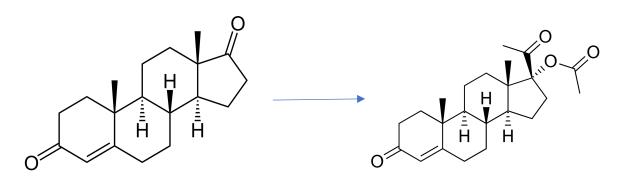
Design Tools

Synopsis, USA Cadence, USA Siemens-Mentor, USA

. . .

Fabless Chip Companies

Apple, Qualcomm, Nvidia, AMD, ...



4-Androstenedione

Basic starting material for many steroid drugs
Largest Manufacturers:
Yicheng Goto Pharmaceutical, **China**Bayer AG, **Germany**

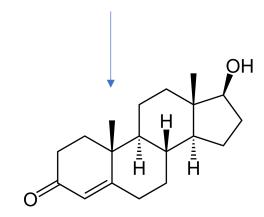
Spironolactone

Pfizer: Aldactone®

Largest Manufacturers:
Tianjin Jin Jin & Tianjin Tianyao, China

Hydroxyprogesterone Acetate

Produced by Chinese manufacturer



Testosterone and Testosterone Cypionate

Produced by Aspen Pharmaceuticals in the Netherlands

Uses: Hormone therapy

Medroxyprogesterone Acetate

Ā

Pfizer: Provera®

Produced by Farmabios in Italy

Uses: Contraceptive, endometriosis, menopausal hormonal therapy

Top European Countries for Pharmaceutical Exports to USA

- Ireland
- Germany
- Switzerland
- United Kingdom



Voestalpine – High Performance Metals

Linz, Austria
High performance metals
ONLY approved base metal source
NO domestic supplier can meet Boeing/Airbus
specifications



Long-Stanton Manufacturing Co.

West Chester Township, Ohio Manufactures mounting bracket for carbon fiber brakes on Boing 787 (and other commercial aircraft)





Boeing 787 Final Assembly

North Charleston, South Carolina Photo: Post & Courier





Messier-Bugatti-Dowty – Safran Landing Systems

Vélizy-Villacoublay, France Incorporates brackets in carbon fiber brakes, integrates brakes into landing gear

Photos: Safran Landing Systems

Testimony of Willy C. Shih