ASE Technology Holding Co., Ltd. Form 6-K July 27, 2018

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16

UNDER THE SECURITIES EXCHANGE ACT OF 1934

July 27, 2018

Commission

File

Number

001-16125

ASE

Technology

Holding

Co., Ltd.

(Translation

of registrant's

name into

English)

26 Chin

Third Road

Nantze

Export

Processing

Zone

Kaoshiung,

Taiwan

Republic of

China

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

Table of Contents

Exhibit No.	Description
99.1	Investor presentation materials in connection with the earning release of ASE Technology Holding Co., Ltd. for the second quarter of 2018

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ASE TECHNOLOGY HOLDING CO., LTD.

Date: July 27, 2018 By: /s/ Joseph Tung

Name: Joseph Tung

Title: Chief
Financial Officer

Exhibit 99.1

1 ASE Technology Holding Co., Ltd. Jul. 27, 2018 ASE Technology Holding Second Quarter 2018 Earnings Release

Safe Harbor Notice 2 This presentation contains "forward - looking statements" within the meaning of Section 27 A of the United States Securities Act of 1933, as amended, and Section 21 E of the United States Securities Exchange Act of 1934, as amended. Although these forward - looking statements, which may include statements regarding our future results of operations, financial condition or business prospects, are based on our own information and information from other sources we believe to be reliable, you should not place undue reliance on these forward looking statements, which apply only as of the date of this press release. The words "anticipate," "believe," "estimate," "expect," "intend," "plan" and similar expressions, as they relate to us, are intended to identify these forward - looking statements in this press release. Our actual results of operations, financial condition or business prospects may differ materially from those expressed or implied in these forward - looking statements for a variety of reasons, including risks associated with cyclicality and market conditions in the semiconductor or electronic industry; changes in our regulatory environment, including our ability to comply with new or stricter environmental regulations and to resolve environmental liabilities; demand for the outsourced semiconductor packaging, testing and electronic manufacturing services we offer and for such outsourced services generally; the highly competitive semiconductor or manufacturing industry we are involved in; our ability to introduce new technologies in order to remain competitive; international business activities; our business strategy; our future expansion plans and capital expenditures; the strained relationship between the Republic of China and the People's Republic of China; general economic and political conditions; the recent global economic crisis; possible disruptions in commercial activities caused by natural or human - induced disasters; fluctuations in foreign currency exchange rates; and other factors. For a discussion of these risks and other factors, please see the documents we file from time to time with the Securities and Exchange Commission, including the 2017 Annual Report on Form 20 - F for our predecessor company, Advanced Semiconductor Engineering, Inc., filed on March 28, 2018.

Purchase Price Allocation (PPA) Fair Market Value of Ide n tifiable Assets Goodwill NT\$39B PP&E, Identifiable Intangible Assets NT\$51B (incl. \$4B Land) Original Book Value of SPIL NT\$78B • PPA: allocate purchase price into various assets and liabilities acquired from the transaction. Total Purchase Price NT\$168B Book Value No amortization for Goodwill and Land *Total PPA includes operating expenses NT\$253M per quarter from 3Q18 **Jan'18 to Apr'18 PPA expenses NT\$120M per month are calculated based on 33.29% ownership (NT\$mn) 2018 2019 2020 2021 2022 Total PPA 4,008 5,832 4 , 75 1 4 , 57 7 4,572 Q1 360** 1,458 1 , 31 3 1 , 14 6 1,143 Q2 120 *** + 97 2 1,458 1 , 14 6 1 , 14 4 1,143 Q3 1,458 1,458 1 , 14 6 1 , 14 3 1,143 Q4 1,458 1,458 1 , 14 6 1 , 14 3 1,143 Q

Revaluation Gain 4 Revaluation Gain NT\$7.6B Adjusted cost NT\$45.5B \bullet Prior to the transaction, ASE owned 33 . 29 % of SPIL and was valued by equity - method investment at an average adjusted cost of NT \$ 43 . 9 per share, or total adjusted cost of NT \$ 45 . 5 B . \bullet On Apr 30, 2018, such shares were revalued at NT\$51.2 per share, or total value of NT\$53.1B when ASE Technology Holding established and acquired SPIL as a subsidiary. The difference is a one - time revaluation gain of NT\$7.6B. Total Revaluation Value NT\$53.1B of 1/3 SPIL

Consolidated Statements of Comprehensive Income 5 Quarterly Comparison (unaudited) FX (NTD/USD) 29.57 29.33 30.18 Q2 / 2018 % Q1 / 2018 % Q2 / 2017 % QoQ YoY (NT\$ Million) Net Revenues: Packaging 44,318 52 . 4 % 29,368 45 . 2 % 30,494 46 . 2 % 51% 45% Testing 8,467 10 . 0 % 5,679 8 . 7 % 6,350 9 . 6 % 49% 33% EMS 30,472 36 . 1 % 28,686 44 . 2 % 28,210 42 . 7 % 6% 8% Others 1,244 1 . 5 % 1,233 1 . 9 % 972 1 . 5 % 1% 28% Total Net Revenues 84,501 100 . 0 % 64,966 100 . 0 % 66,026 100 . 0 % 30% 28% Gross Profit 13,710 16 . 2 % 10,388 16 . 0 % 12,116 18 . 4 % 32% 13% Operating Income (Loss) 5,387 6 . 4 % 4,316 6 . 6 % 5,219 7 . 9 % 25% 3% Pretax Income (Loss) 12,920 15 . 3 % 3,776 5 . 8 % 11,390 17 . 3 % 242% 13% Income Tax Benefit (Expense) (1,268) - 1 . 5 % (1,420) - 2 . 2 % (3,207) - 4 . 9 % Noncontrolling Interest (189) - 0 . 2 % (260) - 0 . 4 % (336) - 0 . 5 % Net Income Attributable to Shareholders of the Parent 11,463 13 . 6 % 2,096 3 . 2 % 7,847 11 . 9 % 447% 46% Basic EPS 2.70 0.49 1.93 451% 40% Diluted EPS 2.69 0.48 1.78 460% 51% EBITDA 24,893 29 . 5 % 11,893 18 . 3 % 19,085 28 . 9 % 109% 30% Legal Entity Basis 1 1 : Legal entity reporting: The financial results from January to April 2018 reflect the operations of ASE Inc. and its subsidiaries, and operations of ASE Technology Holding Co., Ltd starting from April 30, 2018.

ATM Statements of Comprehensive Income 6 Quarterly Comparison (unaudited) FX (NTD/USD) 29.57 29.33 30.18 Q2 / 2018 % Q1 / 2018 % Q2 / 2017 % QoQ YoY (NT\$ Million) Net Revenues: Packaging 44,973 82 . 5 % 30,313 81 . 8 % 31,718 81 . 2 % 48% 42% Testing 8,467 15 . 5 % 5,679 15 . 3 % 6,350 16 . 3 % 49% 33% Direct Material 1,059 1 . 9 % 1,050 2 . 8 % 960 2 . 5 % 1% 10% Others 35 0 . 1 % 30 0 . 1 % 20 0 . 0 % 17% 75% Total Net Revenues 54,534 100 . 0 % 37,072 100 . 0 % 39,048 100 . 0 % 47% 40% Gross Profit 10,845 19 . 9 % 7,701 20 . 8 % 9,027 23 . 1 % 41% 20% Operating Income (Loss) 4,598 8 . 4 % 3,418 9 . 2 % 4,102 10 . 5 % 35% 12% Pretax Income (Loss) 12,530 23 . 0 % 3,401 9 . 2 % 9,462 24 . 2 % 268% 32% Income Tax Benefit (Expense) (1,095) - 2 . 0 % (1,250) - 3 . 4 % (1,541) - 3 . 9 % Noncontrolling Interest 28 0 . 1 % (55) - 0 . 1 % (74) - 0 . 2 % Net Income Attributable to Shareholders of the Parent 11,463 21 . 0 % 2,096 5 . 7 % 7,847 20 . 1 % 447% 46% EBITDA 23,306 42 . 7 % 10,393 28 . 0 % 11,522 29 . 5 % 124% 102% Legal Entity Basis 1 1 : Legal entity reporting: The financial results from January to April 2018 reflect the operations of ASE Inc. and its subsidiaries, and operations of ASE Technology Holding Co., Ltd starting from April 30, 2018.

EMS Statements of Comprehensive Income 7 Quarterly Comparison (unaudited) FX (NTD/USD) (NT\$ Million) 29.57 29.33 30.18 Q2 / 2018 % Q1 / 2018 % Q2 / 2017 % QoQ YoY EMS Net Revenues 30,476 100 . 0 % 28,691 100 . 0 % 28,248 100 . 0 % 6% 8% Gross Profit 2,868 9 . 4 % 2,700 9 . 4 % 3,121 11 . 0 % 6% - 8 % Operating Income (Loss) 811 2 . 7 % 942 3 . 3 % 1,136 4 . 0 % - 14 % - 29 % Pretax Income (Loss) 1,066 3 . 5 % 1,005 3 . 5 % 1,502 5 . 3 % 6% - 29 % Income Tax Benefit (Expense) (158) - 0 . 5 % (160) - 0 . 6 % (284) - 1 . 0 % Noncontrolling Interest (219) - 0 . 7 % (207) - 0 . 7 % (289) - 1 . 0 % Net Income Attributable to Shareholders of the Parent 689 2 . 3 % 638 2 . 2 % 929 3 . 3 % 8% - 26 % EBITDA 1,589 5 . 2 % 1,532 5 . 3 % 2,014 7 . 1 % 4% - 21 % Legal Entity Basis

Consolidated Statements of Comprehensive Income Quarterly Comparison, Pro - forma Consolidated 2 (unaudited) FX (NTD/USD) 29.57 29.33 30.18 O2 / 2018 % O1 / 2018 % O2 / 2017 % OoO YoY (NT\$ Million) Net Revenues: ATM 61,042 66 . 5 % 54,969 65 . 5 % 58,197 67 . 3 % 11% 5% EMS 30,472 33 . 2 % 28,686 34 . 2 % 28,210 32 . 6 % 6% 8% Others 243 0 . 3 % 224 0 . 3 % 44 0 . 1 % 8% 452% Total Net Revenues 91,757 100 . 0 % 83,879 100 . 0 % 86,451 100 . 0 % 9% 6% Gross Profit 14,735 16 . 1 % 12,178 14 . 5 % 14,668 17 . 0 % 21% 0% Operating Income (Loss) 5,696 6 . 2 % 4,054 4 . 8 % 5,697 6 . 6 % 41% 0% Net Income Attributable to Shareholders of the Parent 3,492 3 . 8 % 736 0 . 9 % 7,802 9 . 0 % 374% - 55 % Basic EPS 0.82 0 . 1 7 1 . 9 2 382% - 57 % Net Income excl. investment disposal gain related to Real Estate 3 3,492 3 . 8 % 736 0 . 9 % 3 , 56 9 4 . 1 % 374% - 2 % Basic EPS excl. Investment disposal gain 3 0.82 0 . 1 7 0 . 8 8 382% - 7 % Additional Commentary From Management: Gross Profit excl. PPA expenses 4 Operating Profit excl. PPA expenses 4 Net Profit excl. PPA expenses 4 & disposal gain 3 15,940 7,153 4,950 17.4% 7.8% 5.4% 13,383 5,512 2,194 16.0% 6.6% 2.6% 15,873 7,155 5,027 18.4% 8.3% 5.8% 19% 30% 126% 0% 0% - 2 % Basic EPS excl. PPA expenses 4 & disposal gain 3 1.17 0 . 5 2 1 . 2 4 125% - 6 % Pro Forma Basis 2 8 2: Pro forma financial information containing ASE and SPIL is prepared on a retrospective adjustment basis starting from January 1, 2017. The retrospective adjustments include (1) depreciation, amortization and rental expense from property, plant and equipment, intangible assets and long - term prepayments for lease due to fair value adjustment from purchase premium (NT\$1.46bn per quarter from 1Q17 to 2Q18), (2) interest expenses derived from the funding of ASE/SPIL deal (NT\$0.45bn per quarter from 1Q17 to 1Q18, NT\$0.48bn in 2Q18), (3) removing the revaluation gain of NT\$7.6bn in 2Q18, and (4) reversing the incurred consulting fee related to the acquisition of SPIL. 3: Investment disposal gain related to Real Estate of NT\$4.2bn in 2O17 4: PPA expenses assumption: total PPA expenses derived from ASE/SPIL transaction were NT\$1.46bn per quarter

ATM Statements of Comprehensive Income Quarterly Comparison, Pro - forma Consolidated 2 (unaudited) FX (NTD/USD) 29 . 5 7 29 . 3 3 30 . 1 8 (N T\$ Mi l lio n) O 2 / 2018 % O1 / 2018 % O2 / 2017 % OoO YoY ATM Net Revenues 61,790 100 . 0 % 55,985 100 . 0 % 59,473 100 . 0 % 10% 4% Gross Profit 11,870 19 . 2 % 9,491 17 . 0 % 11,580 19 . 5 % 25% 3% Operating Income (Loss) 4,907 7 . 9 % 3,157 5 . 6 % 4,580 7 . 7 % 55% 7% Net Income Attributable to Shareholders of the Parent 3,492 5 . 7 % 736 1 . 3 % 7,802 13 . 1 % 374% - 55 % Net Income excl. investment disposal gain related to Real Estate 3 3, 49 2 5 . 7 % 736 1 . 3 % 3, 56 9 6 . 0 % 374% - 2 % Additional Commentary From Management: Gross Profit excl. PPA expenses 4 13,074 21 . 2 % 10,696 19 . 1 % 12,785 21 . 5 % 22% 2% Operating Profit excl. PPA expenses 4 6,365 10 . 3 % 4,615 8 . 2 % 6,038 10 . 2 % 38% 5% 9 Pro Forma Basis 2 2: Pro forma financial information containing ASE and SPIL is prepared on a retrospective adjustment basis starting from January 1, 2017. The retrospective adjustments include (1) depreciation, amortization and rental expense from property, plant and equipment, intangible assets and long - term prepayments for lease due to fair value adjustment from purchase premium (NT\$1.46bn per quarter from 1O17 to 2O18), (2) interest expenses derived from the funding of ASE/SPIL deal (NT\$0.45bn per quarter from 1Q17 to 1Q18, NT\$0.48bn in 2Q18), (3) removing the revaluation gain of NT\$7.6bn in 2O18, and (4) reversing the incurred consulting fee related to the acquisition of SPIL. 3: Investment disposal gain related to Real Estate of NT\$4.2bn in 2Q17 4: PPA expenses assumption: total PPA expenses derived from ASE/SPIL transaction were NT\$1.46bn per quarter

ATM Operations Pro - forma Consolidated 2 (unaudited) 2: Pro forma financial information containing ASE and SPIL is prepared on a retrospective adjustment basis starting from January 1, 2017. The retrospective adjustments include (1) depreciation, amortization and rental expense from property, plant and equipment, intangible assets and long - term prepayments for lease due to fair value adjustment from purchase premium (NT\$1.46bn per quarter from 1Q17 to 2Q18), (2) interest expenses derived from the funding of ASE/SPIL deal (NT\$0.45bn per quarter from 1Q17 to 1Q18, NT\$0.48bn in 2Q18), (3) removing the revaluation gain of NT\$7.6bn in 2Q18, and (4) reversing the incurred consulting fee related to the acquisition of SPIL. Pro Forma Basis 2 1 1 , 3 85 1 1 , 5 80 1 4 , 0 96 14,143 9 , 4 9 1 1 1 , 8 70 5 7 , 9 36 5 9 , 4 73 6 3 , 8 09 6 3 , 4 17 55,985 61,790 19.7% 19.5% 22.1% 22.3% 17.0% 19.2% 0% 1 0 % 2 0 % 3 0 % 0 1 0 , 0 0 0 2 0 , 0 0 0 3 0 , 0 0 0 4 0 , 0 0 0 5 0 , 0 0 0 6 0 , 0 0 0 7 0 , 0 0 0 Q 1 /17 Q 2 /17 Q 3 /17 Q 4 /17 Q 1 /18 Q 2 /18 NT\$ Million Revenue Gross Profit Gross Margin 10

ATM Revenue by Application (unaudited) 11% 32% 34% 11% 34% 11% 33% 12% 33% 14% 31% 16% 55% 55% 55% 53% 53% 53% 60% 80% 100% 40% 57% 20% 0% Q 1/17 Q 2/17 Q 3/17 Q 4/17 Q 1/18 Q 2/18 Communication Computer Automotive, Consumer & Others 11 Pro Forma Basis 2 2: Pro forma financial information containing ASE and SPIL is prepared on a retrospective adjustment basis starting from January 1, 2017. The retrospective adjustments include (1) depreciation, amortization and rental expense from property, plant and equipment, intangible assets and long - term prepayments for lease due to fair value adjustment from purchase premium (NT\$1.46bn per quarter from 1Q17 to 2Q18), (2) interest expenses derived from the funding of ASE/SPIL deal (NT\$0.45bn per quarter from 1Q17 to 1Q18, NT\$0.48bn in 2Q18), (3) removing the revaluation gain of NT\$7.6bn in 2Q18, and (4) reversing the incurred consulting fee related to the acquisition of SPIL.

31% 30% 31% 32% 30% 31% 2% 2% 2% 2% 2% 2% 15% 15% 16% 16% 15% 15% 7% 7% 7% 7% 7% 7% 45% 46% 44% 43% 46% 45% 2 0 % 4 0 % 6 0 % 1 0 0% 8 0 % Material Testing Discrete and Other Wirebonding Bump/FC/WLP/SiP 12 ATM Revenue by Type (unaudited) Pro Forma Basis 2 0% Q1/17 Q2/17 Q3/17 Q4/17 Q1/18 Q2/18 2 : Pro forma financial information containing ASE and SPIL is prepared on a retrospective adjustment basis starting from January 1, 2017. The retrospective adjustments include (1) depreciation, amortization and rental expense from property, plant and equipment, intangible assets and long - term prepayments for lease due to fair value adjustment from purchase premium (NT\$1.46bn per quarter from 1Q17 to 2Q18), (2) interest expenses derived from the funding of ASE/SPIL deal (NT\$0.45bn per quarter from 1Q17 to 1Q18, NT\$0.48bn in 2Q18), (3) removing the revaluation gain of NT\$7.6bn in 2Q18, and (4) reversing the incurred consulting fee related to the acquisition of SPIL.

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EMS Operations EMS Revenue Breakdown (unaudited) 49% 48% 45% 42% 42% 38% 15% 17% 14% 14% 17% 19% 22% 20% 26% 32% 24% 25% 7% 8% 8% 6% 9% 11% 6% 5% 7% 6% 1% 1% 6% 6% 1% 1% 1% 1% 1% 1% 0% 2 0 % 4 0 % 8 0 % 1 0 0% Q 1 /17 Q 2 /17 Q 3 /17 Q 4 /17 Q 1 /18 Q 2 /18 Others Automotive Industrial Consumer Computer Communication 14

Key Balance Sheet Items & Indices (unaudited) 15 (NT\$ Million) Jun. 30, 2018 Mar. 31, 2018 Cash and cash equivalent 68,028 43,146 Financial assets - current 16,966 10,551 Financial assets - non current & investments - equity method 13,202 50,854 Property, plant & equipment 218,447 134,637 Total assets 544,971 356,880 Short - term borrowings & short - term bills payable 57,341 17,381 Current portion of bonds payable 0 0 Current portion of long - term borrowings & capital lease obligations 24,924 5,739 Bonds payable 16,984 16,983 Long - term borrowings & capital lease obligations 117,388 34,435 Total interest bearing debt 216,637 74,538 Total equity (Including non - controlling interest) 211,955 206,027 Quarterly EBITDA 24,893 11,893 Current ratio 1 . 1 1 1 . 5 5 Net debt to equity 0 . 6 2 0 . 0 9

Equipment Capital Expenditure vs. EBITDA (unaudited) 231 317 234 208 254 356 542 858 715 737 558 647 0 3 0 0 6 0 0 9 0 0 Q 1 /17 Q 2 /17 Q 3 /17 Q 4 /17 Q 1 /18 Q 2 /18 US\$ Million Capex EBITDA 16 Pro Forma Basis 2 2: Pro forma financial information containing ASE and SPIL is prepared on a retrospective adjustment basis starting from January 1, 2017. The retrospective adjustments include (1) depreciation, amortization and rental expense from property, plant and equipment, intangible assets and long - term prepayments for lease due to fair value adjustment from purchase premium (NT\$1.46bn per quarter from 1Q17 to 2Q18), (2) interest expenses derived from the funding of ASE/SPIL deal (NT\$0.45bn per quarter from 1Q17 to 1Q18, NT\$0.48bn in 2Q18), (3) removing the revaluation gain of NT\$7.6bn in 2Q18, and (4) reversing the incurred consulting fee related to the acquisition of SPIL.

Third Quarter 2018 Outlook 17 Based on our current business outlook and exchange rate assumptions, management projects overall performance for the third quarter of 2018 to be as follows: • On a pro - forma basis and in USD term, ATM 3 Q 18 capacity should increase 3 - 4 % quarter over quarter while utilization rate should increase 2 - 3 % quarter over quarter; • On a pro - forma basis, ATM 3Q18 gross margin should approach 3Q17 levels; • In USD term, EMS 3Q18 business should be similar to 4Q17 levels; • EMS 3Q18 operating margin should approach 2Q17 levels.

Thank You w w w. a s e g l o b a l . c o m 18