

Management Report for First Fiscal Quarter 2021

Hsinchu, Taiwan, May 12th, 2021 – eMemory Technology Inc. (TPE: 3529) reported financial results for its fiscal quarter, which ended 31st March 2021.

Executive Summary

- Q1 2021 revenue was a record high, up 20.1% sequentially and 43.6% year-over-year.
 Operating income increased 43.5% sequentially and 74.1% year-over-year. EPS was NT\$ 3.93, and ROE at 54.6%.
- Licensing revenue will grow due to continued strong demand for NeoFuse, PUF-based solutions, and MTP-related IPs.
- Royalty revenue will continue its growth momentum for 8-inch and 12-inch as demand and content increases for various applications in 5G, Automotive, and IoT-related applications.

Financial Results

(Amounts in thousands of NT\$)

(Amounts in thousands of NT\$)								
	Q1 2021	Q4 2020	Change (QoQ)	Q1 2020	Change (YoY)			
Revenue	596,734	496,682	20.1%	415,436	43.6%			
Gross Margin	100%	100%	ı	100%	1			
Operating Expenses	259,023	261,327	-0.9%	221,463	17.0%			
Operating Income	337,711	235,355	43.5%	193,973	74.1%			
Operating Margin	56.6%	47.4%	9.2 ppts	46.7%	9.9 ppts			
Net Income Attributable to Shareholders of the Company	292,982	193,343	51.5%	176,758	65.8%			
Net Margin	48.8%	38.7%	10.1 ppts	42.5%	6.3 ppts			
EPS (Unit: NTD)	3.93	2.60	51.2%	2.38	65.1%			
ROE	54.6%	41.8%	12.8 ppts	39.5%	15.1 ppts			

Revenue Analysis

(Amounts in thousands of NT\$)

	Q1 2021	Q4 2020	Change (QoQ)	Q1 2020	Change (YoY)
Licensing	176,993	154,472	14.6%	106,446	66.3%
Royalty	419,741	342,210	22.7%	308,990	35.8%
Total	596,734	496,682	20.1%	415,436	43.6%



(Amounts in thousands of US\$)

	Q1 2021	Q4 2020	Change (QoQ)	Q1 2020	Change (YoY)
Licensing	6,241	5,350	16.7%	3,542	76.2%
Royalty	14,788	11,859	24.7%	10,336	43.1%
Total	21,029	17,209	22.2%	13,878	51.5%

Revenue analysis by technology

	Q1 2021										
Technology	7	Total Revenue	е	Lic	ensing Rever	nue	Royalty Revenue				
	% of Q1 Change Change Revenue (QoQ) (YoY)			% of Q1 Change Change Licensing (QoQ) (YoY)		% of Q1 Royalty	Change (QoQ)	Change (YoY)			
NeoBit	40.4%	8.3%	7.7%	15.4%	3.3%	13.4%	50.8%	8.9%	7.1%		
NeoFuse	48.0%	16.7%	65.8%	51.3%	-17.6%	21.6%	46.7%	44.5%	99.4%		
PUF-Based	0.9%	115.3%	812.6%	3.1%	115.3%	812.6%	0.0%	0.0%	0.0%		
МТР	10.7%	144.5%	244.2%	30.2%	249.7%	652.0%	2.5%	-3.2%	-8.2%		

- NeoBit: OTP technology covers from 0.25um to 55nm.
- NeoFuse: OTP technology covers mainly from 0.18um to 5nm.
- PUF-Based: OTP technology covers mainly from 65nm to 5nm.
- MTP: MTP technology covers from 0.18um to 22nm, offering high-density memory and allowing up to 100K rewritable times with zero additional masking layers.

Royalty revenue analysis by wafer size (8-inch vs 12-inch)

	Q1 2021							
Wafer Size	% of Q1	Change (QoQ)	Change (YoY)					
8-inch	54.8%	10.2%	16.2%					
12-inch	45.2%	42.1%	70.9%					

Key Business Developments

Licensing

- Technology License
 - ✓ 5 licensing contracts were signed during this quarter.
 - ✓ As of March 31st, 2021, we have technologies under development for the adoption of 105 different process platforms, ranging from 0.25um to 5nm.



Development of Key Technology on 12-inch Nodes

	5/6nm	7/10nm	12/16nm	22/28nm	40nm	55/65nm	80/90nm	0.11/0.13um	0.18um	Total
Qualified	0	2	5	34	16	26	16	17	1	117
Developing	4	1	4	12	5	15	13	3	3	60

Design License

- ✓ A total of 155 product tape-outs occurred in the first quarter of 2021.
 - 1 tape-out at 7nm for Automotive Processor.
 - 1 tape-out at 14nm/16nm for Advanced Processor.
 - 24 tape-outs at 22nm/28nm for MCU, ISP, OLED Driver, Ethernet, Wi-Fi, DTV, STB, Video/Audio, and T-con.
 - 1 tape-out at 25nm for DRAM.
 - 14 tape-outs at 40nm for MCU, OLED Driver, TDDI, Ethernet, and 2.4GHz.
 - 21 tape-outs at 55nm/63nm/65nm for PMIC, CIS, MCU, OLED Driver, LCD Driver, TDDI, and Audio.
 - 7 tape-outs at 80nm/90nm for CIS, OLED Driver, LCD Driver, and TDDI.
 - 13 tape-outs at 0.13um for PMIC, Controller Sensor, Temperature Sensor, MCU,
 LCD Driver, and RFID.
 - 70 tape-outs at 0.18um for PMIC, Ambient Light Sensor, Accelerometer, Gyroscope, Magnetics, Pressure Sensor, Fingerprint Sensor, MCU, OLED Driver, RFID, Bluetooth, Clock, Touch Panel Controller, Motor Driver, Oscillator, and etc.
 - 3 tape-outs at 0.25um for PMIC, Ambient Light Sensors, and Accelerometer.
- ✓ As of March 31st, 2021, eMemory's cumulative number of design licenses has increased to 5,423—a direct result of our ongoing effort in expanding and diversifying our technologies for adoption in a wide range of applications.

Future Growth Drivers

<u>License</u>

• Strong demand for NeoFuse, PUF-based solutions, and MTP-related will drive licensing revenue growth for the year.

Royalty

- 8-inch royalties will continue its momentum due to demand and content increase for PMIC, MCU, and Sensor-related in 5G, Automotive, and IoT-related applications.
- 12-inch royalties will have strong growth as customers are ramping up production for TDDI, OLED, ISP, DTV, STB, WiFi 6, Bluetooth, Ethernet, Switch, TWS, DRAM, and others.
- Royalties from 16nm start to kick in, followed by 7nm in the second half of the year.

ememory

New Business Development

- NeoFuse in advanced processes is being adopted for secure Key storage and is seeking to replace the conventional e-Fuse. This will be a trend in hardware security.
- Business activities of PUF-based security solutions are in progress in the applications of IoT, industrial IoT, AI, Blockchain, FPGA, Data Processor Unit (DPU), Mobile Storage (UFS), and Automotive.
- PUFrt and PUFiot have been adopted by several customers across various applications.
- Customer adoption cases have been very successful for the collaboration with ARM, and will expand the cooperation to more product applications.

New IP Technology Development

- 6nm is going into characterization and qualification after demonstrating successful silicon results.
- 5nm plus (N5P) going into wafer processing after completing silicon verification.
- We have announced the adoption of our IP by Achronix for FPGA Hardware Root of Trust.
- We will continue to develop our PUF-based solution to implement HSM (Hardware Security Module), which can be embedded in the chip to provide security functions for network applications.

Financial Review

Gross margin

Gross margin remained at 100%.

Operating expenses

• The total operating expenses in Q1 2021 were NT\$ 259.02 million and represented 43.4% of the total revenue, which decreased from 53.3% in the prior year. The annual increase was mainly attributable to expenditure increases such as human resources, rewards and bonuses, and the compensation of employees and directors.

Non-operating items and income tax expense

- Non-operating items for the quarter were a gain of NT\$ 6.63 million, compared to a loss of NT\$ 4.62 million in Q4 2020.
- Q1 2021 effective tax rate was 15.4%.

Net Income and EPS

- Net income attributable to shareholders of the company for the quarter was NT\$ 292.98 million, an increase of 51.5% sequentially and 65.8% year-over-year.
- Earnings per share was NT\$ 3.93 in Q1 2021. ROE was 54.6%.

ememory

Current assets and current liabilities

- As of March 31st, 2021, cash increased by NT\$ 324.47 million from December 31st, 2020 to NT\$ 2,078.58 million.
- Total current assets including cash were NT\$ 2,249.43 million, with an increase of NT\$ 350.52 million from December 31st, 2020. The increase was due to the growth in revenue.
- Total current liabilities increased by NT\$ 47.61 million from December 31st, 2020 to NT\$ 495.70 million.
- Net working capital was NT\$ 1,753.73 million and the current ratio was 4.54x.

Cash flows

- As of March 31st, 2021, net cash generated from operating activities totaled NT\$ 333.82 million, including NT\$ 344.34 million from income before income tax, NT\$ 14.80 million from depreciation and amortization, and NT\$ 25.32 million used in other operating activities, which included tax payment of NT\$ 16.18 million.
- Net cash used in investing activities was NT\$ 14.71 million at the end of March 31st, 2021, primarily related to the acquisition of property, plant, equipment, and intangible assets.
- Net cash generated from financing activities was NT\$ 5.21 million at the end of March 31st, 2021, mainly attributable to the increase of execution of employees' stock options.
- As a result, cash increased by NT\$ 324.47 million to NT\$ 2,078.58 million from December 31st, 2020 to March 31st, 2021.

Employee

As of March 31st, 2021, eMemory has 266 full-time employees, including 182 R&D engineers. Our subsidiary, PUFsecurity has 30 full-time employees, including 16 R&D engineers.

Cautionary Statement

This report contains forward-looking statements, which are subject to risk factors associated with the semiconductor and intellectual property business. We believe that the expectations reflected in these statements are reasonable. However, they may be affected by a variety of variables, many of which are beyond our control. These variables could cause actual results or trends to differ materially which include, but are not limited to: wafer price fluctuation, actual demand, rapid technology change, delays or failures in customers' tape-outs into wafer production, our ability to negotiate, monitor and enforce agreements for the determination and payment of royalties, any bug or fault in our technology which leads to significant damage to our technology and reputation, actual or potential litigation, semiconductor industry cycle and general economic conditions. Unless as required by law, eMemory undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

ememory

Contact

Fiona Lai Investor Relations eMemory Technology Inc. +886-3-5601168 ir@ememory.com.tw

-Financial Statements To Follow-

CONSOLIDATED BALANCE SHEETS (In Thousands of New Taiwan Dollars)

	March 31, (Review		December 2020 (Audite	·	March 31, (Review			March 31, (Review		Decembe 2020 (Audite	•	March 31, (Reviewe	
ASSETS	Amount	%	Amount	%	Amount	%	LIABILITIES AND EQUITY	Amount	%	Amount	%	Amount	%
CURRENT ASSETS							CURRENT LIABILITIES						
Cash	\$2,078,580	74	\$1,754,111	71	\$1,530,426	68	Contract liabilities - current	\$ 59,669	2	\$ 50,802	2	\$ 43,005	2
Accounts receivable - net	89,004	3	117,449	5	108,376	5	Other payables	112,323	4	136,590	5	87,170	4
Accounts receivable - related parties	28,535	1	-	-	-	-	Other payables - related parties	-	-	-	-	40	-
Other receivables	4,641	-	105	-	171	-	Bonuses payable to employees and directors	196,081	7	164,397	7	136,743	6
Other receivables - related parties	425	-	277	-	389	-	Payables on equipment	503	-	5,134	-	6,215	-
Prepayments	45,087	2	23,711	1	50,821	2	Current tax liabilities	123,337	4	87,696	4	81,533	4
Other current assets	3,159		3,262		3,897		Lease liabilities - current	1,534	-	1,340	-	3,002	-
Total current assets	2,249,431	80	<u>1,898,915</u>	<u>77</u>	<u>1,694,080</u>	<u>75</u>	Other current liabilities	2,252		2,134		6,363	
					· · · · · · · · · · · · · · · · · · ·		Total current liabilities	495,699	17	448,093	18	364,071	<u>16</u>
NON-CURRENT ASSETS Financial assets at fair value through other							NON-CURRENT LIABILITIES						
comprehensive income - noncurrent	21,457	1	21,037	1	15,948	1	Lease liabilities - noncurrent	3,829	_	2,073	_	3,631	_
Financial assets at amortized cost -	,	•	,	·	. 5,5 . 5	•		5,525		_,0.0		0,00.	
noncurrent	114	_	114	_	113	-	Net defined benefit liabilities - noncurrent	21,038	1	21,233	1	21,229	1
Investment accounted for using equity								_,,,,,,		_1,_5		,	
method	4,707	_	5,517	-	4,444	-	Guarantee deposits received	530	_	530	-	530	-
Property, plant and equipment	461,318	16	467,393	19	473,370	21	Total non-current liabilities	25,397	1	23,836	1	25,390	1
Right-of-use assets	5,307	_	3,352	-	6,553	-	Total liabilities	521,096	18	471,929	19	389,461	17
Intangible assets	75,559	3	76,814	3	72,583	3							
· ·	·		,		,		EQUITY ATTRIBUTABLE TO SHAREHOLDERS						
Deferred tax assets	2,937	-	4,022	-	2,333	-	OF THE COMPANY						
Prepayments for equipment	3,300	-	50	-	-	-	Ordinary shares	760,778	<u>27</u>	760,592	<u>31</u>	758,336	<u>34</u>
Refundable deposits	428		358		349	<u> </u>	Capital surplus	397,656	14	391,907	16	405,547	18
Total non-current assets	575,127	20	578,657	23	575,693	25	Retained earnings						
	<u> </u>						Legal reserve	455,518	16	455,518	18	401,471	17
							Special reserve	65,586	3	65,586	3	61,932	3
							Unappropriated earnings	1,079,989	<u>38</u>	787,007	32	722,411	_32
							Total retained earnings	<u>1,601,093</u>	57	<u>1,308,111</u>	<u>53</u>	<u>1,185,814</u>	<u>52</u>
							Other equity						
							Exchange differences on the translation of the						
							financial statements of foreign operations	(19)	-	(26)	-	(5)	-
							Unrealized gain (loss) on financial assets at						
							fair value through other comprehensive						
							income	(<u>59,655</u>)	(<u>2</u>)	(<u>60,075</u>)	(<u>3</u>)	(<u>65,164</u>)	(<u>3</u>)
							Total other equity	(<u>59,674</u>)	(<u>2</u>)	(<u>60,101</u>)	(<u>3</u>)	(<u>65,169</u>)	(<u>3</u>)
							Treasury shares	(404,238)	(<u>14</u>)	(404,238)	(<u>16</u>)	(404,238)	(<u>18</u>)
							Total equity attributable to shareholders of						
							the Company	2,295,615	82	1,996,271	81	1,880,290	83
							NON-CONTROLLING INTERESTS	7,847		9,372		22	
							Total equity	<u>2,303,462</u>	82	2,005,643	<u>81</u>	<u>1,880,312</u>	_83
TOTAL	\$2,824,558	<u>100</u>	<u>\$2,477,572</u>	<u>100</u>	\$2,269,773	<u>100</u>	TOTAL	\$2,824,558	<u>100</u>	\$2,477,572	<u>100</u>	\$2,269,773	<u>100</u>

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (In Thousands of New Taiwan Dollars, Except Earnings Per Share) (Reviewed, Not Audited)

	Three Months Ended March 31				
	2021		2020		
	Amount	%	Amount	%	
OPERATING REVENUE	\$ 596,734	100	\$ 415,436	100	
OPERATING COSTS	<u>-</u>		<u>-</u>		
GROSS PROFIT	596,734	<u>100</u>	415,436	<u>100</u>	
OPERATING EXPENSES Selling and marketing expenses General and administrative expenses Research and development expenses Expected credit gain Total operating expenses	37,081 63,303 165,995 (6 10 28 (<u>1</u>) <u>43</u>	29,520 48,343 145,693 (<u>2,093</u>) <u>221,463</u>	7 12 35 (<u>1</u>) <u>53</u>	
OPERATING INCOME	337,711	<u>57</u>	<u>193,973</u>	<u>47</u>	
NON-OPERATING INCOME AND EXPENSES Interest income Other income Other gains and losses Finance costs Share of loss of associates Total non-operating income and expenses	1,826 1,111 4,525 (22) (810)	- 1 - - - 1	2,400 1,188 5,767 (34) (938) 8,383	1 - 1 - - - 2	
PROFIT BEFORE INCOME TAX	344,341	58	202,356	49	
INCOME TAX EXPENSE	52,907	9	25,598	<u>6</u>	
NET PROFIT	291,434	<u>49</u>	<u>176,758</u>	<u>43</u>	

(Continued)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (In Thousands of New Taiwan Dollars, Except Earnings Per Share) (Reviewed, Not Audited)

			Months E	Ended March 31				
		2021			2020			
OTHER COMPREHENSIVE INCOME Items that will not be reclassified	Aı	mount	%	Am	nount	%		
subsequently to profit or loss: Unrealized gain on investments in equity instruments at fair value through other comprehensive								
income Items that may be reclassified subsequently to profit or loss: Exchange differences on the translation of the financial	\$	420	-	\$	418	-		
statements of foreign operations Share of the other comprehensive loss of associates accounted for		8	-		-	-		
using the equity method Other comprehensive income		428	<u> </u>	(<u>1</u>) 417	-		
TOTAL COMPREHENSIVE INCOME	\$	<u>291,862</u>	<u>49</u>	<u>\$ 1</u>	<u>77,175</u>	<u>43</u>		
NET PROFIT (LOSS) ATTRIBUTABLE TO: Shareholders of the Company Non-controlling interests	(292,982 1,548) 291,434	49 49		76,758 - 76,758	43 		
TOTAL COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO: Shareholders of the Company Non-controlling interests	(293,409 1,547) 291,862	49 		77,175 <u>-</u> 77,175	43 		
EARNINGS PER SHARE Basic Diluted	<u>\$</u> \$	3.93 3.92		<u>\$</u> \$	2.38 2.37			

(Concluded)

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (In Thousands of New Taiwan Dollars)
(Reviewed, Not Audited)

				E	Equity Attributab	ole to Shareholders	of the Company						
								Othe Exchange Differences on the Translation of the Financial	r Equity Unrealized Gain (Loss) on Financial Assets at Fair Value Through				
	Ordinary					ed Earnings		Statements	Other				
	Number of Shares (In Thousands)	Amount	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Total	of Foreign Operations	Comprehensive Income	Treasury Shares	Total	Non-Controlling Interests	Total Equity
BALANCE, JANUARY 1, 2020	75,834	\$ 758,336	\$ 404,446	\$ 401,471	\$ 61,932	\$ 545,653	\$1,009,056	(\$ 4)	(\$ 65,582)	(\$ 404,238)	\$1,702,014	\$ -	\$1,702,014
Changes in percentage of ownership interests in subsidiaries	-	-	15	-	-	-	-	-	-	-	15	(15)	-
Change in capital surplus from investments in associates accounted for by using the equity method	-	-	1	-	-	-	-	-	-	-	1	-	1
Net profit for the three months ended March 31, 2020	-	-	-	-	-	176,758	176,758	-	-	-	176,758	-	176,758
Other comprehensive income (loss) for the three months ended March 31, 2020	-			-		-		(1)	418	_	417		417
Total comprehensive income (loss) for the three months ended March 31, 2020	-					176,758	176,758	(1)	418	_	<u> 177,175</u>	-	<u> 177,175</u>
Share-based payments			1,085	-				<u>-</u>	<u>-</u> _	<u>-</u>	1,085	37	1,122
BALANCE, MARCH 31, 2020	75,834	<u>\$ 758,336</u>	\$ 405,547	<u>\$ 401,471</u>	<u>\$ 61,932</u>	<u>\$ 722,411</u>	<u>\$1,185,814</u>	(<u>\$ 5</u>)	(<u>\$ 65,164</u>)	(\$ 404,238)	<u>\$1,880,290</u>	<u>\$ 22</u>	<u>\$1,880,312</u>
BALANCE, JANUARY 1, 2021	76,060	\$ 760,592	\$ 391,907	\$ 455,518	\$ 65,586	\$ 787,007	\$1,308,111	(\$ 26)	(\$ 60,075)	(\$ 404,238)	\$1,996,271	\$ 9,372	\$2,005,643
Changes in percentage of ownership interests in subsidiaries	-	-	5	-	-	-	-	-	-	-	5	(5)	-
Net profit for the three months ended March 31, 2021	-	-	-	-	-	292,982	292,982	-	-	-	292,982	(1,548)	291,434
Other comprehensive income for the three months ended March 31, 2021						<u>-</u>		7	420	-	427	1	428
Total comprehensive income (loss) for the three months ended March 31, 2021		=	=	-		292,982	292,982	7	420	-	293,409	(1,547_)	291,862
Issuance of ordinary shares under employee share options	18	186	5,744	-	-	-	-	-	-	-	5,930	-	5,930
Share-based payments	-	-	-	-	-	-	-	-	-	-	-	20	20
Non-Controlling Interests		-	-	-		_			-			7	7
BALANCE, MARCH 31, 2021	<u>76,078</u>	<u>\$ 760,778</u>	<u>\$ 397,656</u>	<u>\$ 455,518</u>	<u>\$ 65,586</u>	<u>\$1,079,989</u>	<u>\$1,601,093</u>	(<u>\$ 19</u>)	(\$ 59,655)	(\$ 404,238)	<u>\$2,295,615</u>	<u>\$ 7,847</u>	<u>\$2,303,462</u>

CONSOLIDATED STATEMENTS OF CASH FLOWS (In Thousands of New Taiwan Dollars) (Reviewed, Not Audited)

	Three Months Ended Marc				
		2021		2020	
CASH FLOWS FROM OPERATING ACTIVITIES					
Profit before income tax	\$	344,341	\$	202,356	
Adjustments for:					
Depreciation expenses		10,351		10,222	
Amortization expenses		4,446		3,810	
Expected credit gain	(7,356)	(2,093)	
Finance costs		22		34	
Interest income	(1,826)	(2,400)	
Share-based payments		20		1,122	
Share of loss of associates		810		938	
Net loss (gain) on foreign currency exchange		1,125	(1,419)	
Changes in operating assets and liabilities					
Accounts receivable		34,588		21,631	
Accounts receivable - related parties	(28,470)		-	
Other receivables	(4,493)		1,691	
Other receivables - related parties	(148)		21	
Prepayments	(21,376)	(23,614)	
Other current assets		103		378	
Contract liabilities		8,867		10,168	
Other payables	(24,391)		6,222	
Other payables- related parties		-		40	
Other current liabilities		118		4,632	
Net defined benefit liabilities	(195)	(155)	
Bonuses payable to employees and directors		31,684		11,623	
Cash generated from operations		348,220		245,207	
Interest received		1,783		2,467	
Income tax paid	(<u>16,181</u>)	(7,27 <u>5</u>)	
Net cash generated from operating activities		333,822		240,399	

(Continued)

CONSOLIDATED STATEMENTS OF CASH FLOWS (In Thousands of New Taiwan Dollars) (Reviewed, Not Audited)

	Three Months I	Ended March 31
CASH ELOVAS EDOM INVESTINO ACTIVITIES	2021	2020
CASH FLOWS FROM INVESTING ACTIVITIES Proceeds from disposal of financial assets at amortized cost Acquisition of property, plant and equipment Increase in refundable deposits Acquisition of intangible assets	\$ - (8,203) (70) (3,191)	\$ 33,500 (4,280) - (2,588)
Increase in prepayments for equipment Net cash (used in) generated from investing activities	(<u>3,250</u>) (<u>14,714</u>)	26,632
CASH FLOWS FROM FINANCING ACTIVITIES Repayment of the principal portion of lease liabilities Exercise of employee share options Increase in non-controlling interests Interest paid Net cash generated from (used in) financing activities	(709) 5,930 7 (22) 5,206	(780) - - (34) (814)
EFFECTS OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH HELD IN FOREIGN CURRENCIES	<u>155</u>	<u>351</u>
NET INCREASE IN CASH	324,469	266,568
CASH AT THE BEGINNING OF THE PERIOD	1,754,111	1,263,858
CASH AT THE END OF THE PERIOD	\$ 2,078,580	<u>\$ 1,530,426</u>
		(Concluded)