

# Initiation Report

TAOPING INC.



Company Sponsored Research  
Initiation of Coverage  
10/25/2018

## Taoping Inc.

### Innovative Ad Terminal and Service Provider Within a Large and Growing Market

#### Investment Highlights:

- Taoping (TAOP) operates within the large and growing digital out-of-home advertising market, which is expected to reach \$11.33 billion by 2023<sup>1</sup>. Taoping is uniquely positioned as a leading provider of internet-based advertisement distribution and advertisement display terminal sharing systems in China. The company engages in making advertising and branding affordable and effective for everyone and provides a one stop solution for digital display terminal sharing, new media resource exchange, and e-commerce transactions
- There is a significant opportunity for Taoping to grow rapidly, with large-scale digitalization efforts occurring in the government and advertising markets in China. Taoping is creating and developing an innovative new media ecosystem "Taoping Chain" which includes Smart IoT Terminal, Taoping Net/App, and Taoping e-Store. Connecting cloud-based ad terminal owners, advertisers, and consumers, Taoping Chain enables all participants of the new media community to efficiently promote branding, disseminate information, and exchange resources
- The company has benefited from its well-planned market strategy. With strategic partnerships with Shenzhen Taoping New-Media Limited, the company founded and played a key role in Taoping Alliance, a new media operating organization including numerous advertising agencies throughout China, which greatly improved the company's market expansion capability and industry reputation. By the end of 2018, TAOP's products and services will cover 100 prefecture cities and 200 million people. The company will continue to optimize distribution and build upon their established sales base and customers to sell new technologies, which should enhance shareholder value
- We view Taoping as a unique investment opportunity based on its innovative products and technology. Based on an equal weighting of a discounted cash flow and comparable company analysis model, our valuation models indicate a fair value for the shares of \$2.00, roughly 70% above the current price

#### Company Description

Taoping Inc. provides cloud-based platform, resource sharing, and big data solutions to the Chinese new media, education residential community management, and elevator Internet of Things (IoT) industries primarily in the People's Republic of China. The company was founded in 1993 and is headquartered in Shenzhen, China

#### China Emerging Growth

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#### Price-Volume History



#### Key Statistics

Closing Price (As Of 10/24/2018) **\$1.13**

Valuation **\$2.00**

52 Week Range **\$1.10-\$5.20**

Average Daily Volume(th) **159.47**

Shares Outstanding (M) **40.80**

Market Capitalization (M) **\$49.32**

Number of Analysts Covering **1**

Enterprise Value/Revenue **4.03x**

#### Revenue (\$ in millions)

Dec. FY	2017A	2018E	2019E
1Q	N/A	N/A	N/A
2Q	N/A	N/A	N/A
3Q	N/A	N/A	N/A
4Q	N/A	N/A	N/A
FY	18.19A	28.51E	39.27E

#### EPS (\$)

Dec. FY	2017A	2018E	2019E
1Q	N/A	N/A	N/A
2Q	N/A	N/A	N/A
3Q	N/A	N/A	N/A
4Q	N/A	N/A	N/A
FY	.02A	.02E	.03E

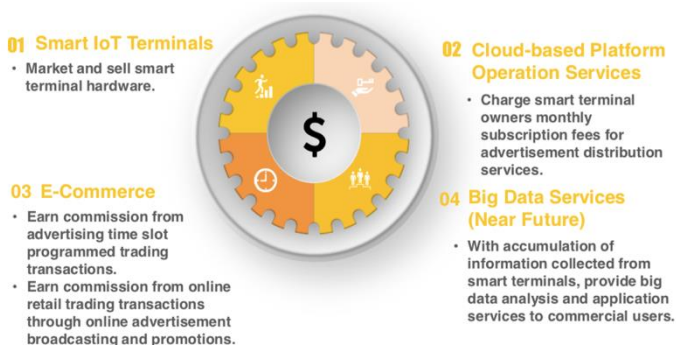
1- Research and Markets, (n.d.). Digital Out of Home Advertising Market - Forecasts from 2018 to 2023. Retrieved from [https://www.researchandmarkets.com/research/kqnzjw/11\\_32\\_billion?w=5](https://www.researchandmarkets.com/research/kqnzjw/11_32_billion?w=5)

## Investment Thesis

Taoping Inc. offers investors a high risk high reward opportunity to invest in a robust top-line revenue growth business within a large addressable market. Taoping operates as a leading cloud-based ad terminal and service provider of the digital advertising distribution network and new media resource sharing platform. The company has a great vision and is well positioned in the Out-of-Home Advertising Market which was valued at \$25.5 billion in 2017 with a yearly growth rate of over 20% in China. TAOP's "Smart IoT Terminal - Taoping Net/App - Taoping e-Store" ecosystem makes the advertising business more instant and is leading the future within the advertising industry. The Smart IoT Terminal is a cloud-based ad display terminal hardware with Taoping's proprietary operating system for locations such as elevators and subways. Taoping Net and Taoping App provide consumers and Smart IoT Terminal owners an advertising-resources sharing and trading service platform, providing ad trading and ad management on approximately 80,000 terminals (and the number is increasing) making advertising accessible and convenient, with customers able to distribute and manage their ads on mobile phones. Taoping e-store is a platform built exclusively for user communications, where advertisers and consumers can interact directly. TAOP is well positioned to continue capturing market share by building a central network across China and sharing their expertise. The company is positioning Beijing, Shanghai, Guangzhou, and Shenzhen as anchors to support five regional hubs and interconnect 30 provincial second tier cities, covering the most populated areas in China. Since May 2017, TAOP has signed 35 regional contracts for the sale of 116,000 terminals and with the respective contract revenue being approximately \$36.2 million. By the end of 2018, TAOP will complete its construction in Shanxi and Hunan provinces and expand its service into smaller cities, bringing its coverage to 100 prefecture cities and 200 million people. TAOP generates its revenue from the sales of Smart IoT Terminal hardware, subscription fees for advertisement distribution services, commissions from online trading transactions and their big data services. TAOP's revenue in 2017 was \$18.18 million, which increased 78% compared with their revenue in 2016. As TAOP's expansion plan in China continues, their revenues from Smart IoT Terminal hardware and subscription fees are expected to continue expanding. In addition, the company's customer profiles are expanding rapidly. *Within the past 12 months, more than 100 leading brands in automobile, banking and recruitment industries have posted ads via TAOP, including Audi, Toyota, Zhaoping, 58 City, Everbright Bank, etc.* Taoping will continue to optimize distribution and build upon their established sales base and customers to sell new technologies, which will significantly boost shareholder value. We view Taoping as a unique, high risk small capitalization new media investment opportunity with significant upside potential.

*Taoping offers investors a high risk high reward opportunity to invest in a robust top-line revenue growth business with a large addressable market, which was valued at \$25.5 billion in 2017 and has a yearly growth of over 20%*

*Taoping will continue to optimize distribution and build upon their established sales base and customers to sell new technologies, which could significantly boost shareholder value*

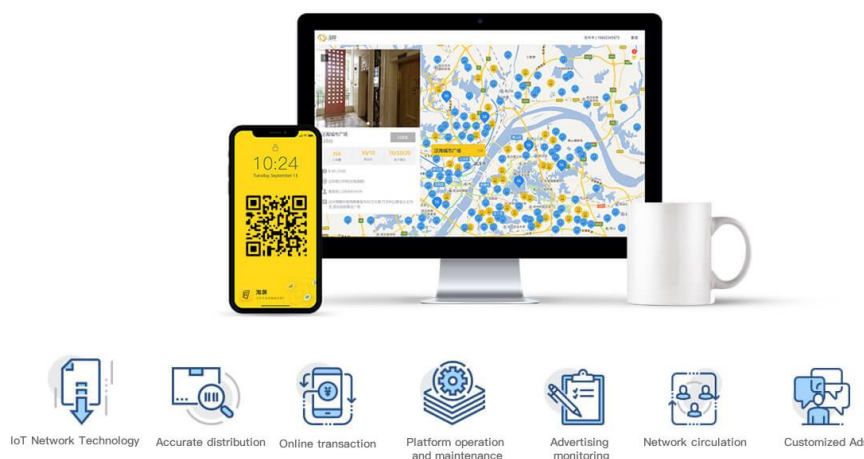


Source: Taoping Investor Presentation

## Company Overview

Taoping Inc. is a leading cloud-based ad terminal and service provider of digital advertising distribution networks and new media resource sharing platforms within the out-of-home advertising market in China. The company engages in making advertising and branding affordable and effective for everyone and provides a one stop solution for digital display terminal sharing, new media resource exchange, and e-commerce transactions. In addition, it provides a broad portfolio of software and hardware with fully integrated solutions, including information technology infrastructure, internet-enabled display technologies, and internet of things (IoT) platforms to customers in government, education, residential community management, media, transportation, and other private sectors. Taoping was incorporated in 1993 and is based in Shenzhen, China. The company was formerly known as China Information Technology Inc. and changed its name to Taoping Inc. in June 2018.

*Taoping is an advanced provider of internet-based ad distribution and ad display terminal sharing systems*



Source: Company Website

Taoping has very large ambitions. It integrates the Internet with the media field, building a cloud-based information distribution and ad delivery platform to meet advertisers' needs to distribute fragmented ads. Currently the company is creating and developing an innovative new media ecosystem "Taoping Chain" which includes Smart IoT Terminal, Taoping Net/App, and Taoping e-Store. The Smart IoT Terminal is a cloud-based ad display terminal hardware with Taoping's proprietary operating system for locations such as elevators and subways. To date, the company has received orders for nearly 170,000 terminals worth over \$53 millions. Taoping Net and Taoping App provide consumers and Smart IoT Terminal owners an advertising-resources sharing and trading service platform, which could integrate nationwide high-quality screen resources, making ad trading and ad management on approximately 80,000 terminals more accessible and convenient, where customers can distribute and manage their ads on their mobile

phones. Taoping e-store is a platform built exclusively for direct to consumer communication. Connecting cloud-based ad terminal owners, advertisers, and consumers, Taoping Chain enables all participants of the new media community to efficiently promote their brand, disseminate information, and exchange resources.

*Taoping wants to change the traditional out-of-home advertising industry by introducing big data services*



Source: Taoping Investor Presentation

Additionally, Taoping wants to change the traditional out-of-home advertising industry by introducing big data services. With cameras in its Smart IoT Terminals, Taoping could utilize facial recognition and real time tracking technology to capture audience's information such as gender, age, frequently trafficked areas, for instance. By compiling and analyzing data related to buyer/seller behavioral preferences, Taoping can provide value-added services to their customers and allow advertisers to customize ads to increase engagement and purchasing behavior, creating a virtuous cycle for demand for Taoping's terminals and services.

Residential



Commercial



Retail



Outdoor



Source: Company Website



The TAOP platform can enter into various venues, such as residential communities, office buildings, commercial complexes, and other urban areas. It also offers a platform to establish media projects, submit advertisement proposals, revise and approve advertising proposals and process payments, upload advertising content remotely, and track and analyze performance data for agencies and customers who work in the media industry. Taoping sees significant growth potential in the new media industry and is perfectly positioned to meet consumer's growing demand for building two-way communications between brands and their targeted local or global audience. Within the past 12 months, more than 100 leading brands in automobile, banking and recruitment industries have posted advertising via TAOP, including Audi, Toyota, Zhaoping, 58 City, Everbright Bank, etc. For now, "Taoping Alliance" resources sharing platform has covered services for more than 200 million people from more than 20 major cities in China and 100 national cities.

*The trend of urbanization increases residents' average commute time within cities, which brings large opportunity for out-of-home advertisers*

As of June 30<sup>th</sup>, 2018, TAOP reported revenue of \$11.3 million, up over 98.3% compared with \$5.7 million for the same period last year. Gross profit was 46.3% of revenue for the first months of 2018, increasing from 42.5% in the same period in 2017. Taoping plans to continue expanding its top line growth aggressively and build out its nationwide terminal network, making it more difficult for new competitors.



Taoping's Customers Source: Taoping Investor Presentation

## Corporate Timeline

- 10/19/2018 Taoping Inc. announced five companies have joined the Taoping Alliance at the Taoping New Media Promotion Conference held in Kunming city
- 08/15/2018 Taoping reports 98.3% YoY revenue increase for the six months ending June 30, 2018
- 07/13/2018 Taoping Inc. attended the Global intelligence industry development and IoT peak BBS hosted by Institute of microelectronics, Chinese academy of sciences, and Shaoxing China municipal party committee organization department
- 05/29/2018 China Information Technology, Inc. officially changed its name to Taoping Inc. (NASDAQ: TAOP)
- 08/30/2017 China Information Technology, Inc. launched CNIT internet+ sharing new media
- 07/28/2016 China Information Technology, Inc. officially launched Yunfa Net system+, providing solutions for publishers from different industries
- 11/03/2014 China Information Technology, Inc. formed a wholly owned PRC subsidiary, Shenzhen Taoping Internet Technology Co. Ltd. (“Taoping”) to construct online exchange for out-of-home advertisement resources
- 10/31/2012 China Information Technology, Inc. completed a corporate reorganization and was listed on the NASDAQ Global Select Market under the trading symbol of “CNIT”.
- 08/26/2010 China Information Security Technology, Inc. changed its name to China Information Technology, Inc.
- 10/01/2009 China Information Security Technology, Inc. completed the acquisition of HPC Electronics (China) Company, Ltd.
- 04/07/2008 Irish Mag, Inc. re-incorporated in the State of Nevada by merging and changed its name to China Information Security Technology, Inc.
- 04/29/2003 The company was incorporated as Irish Mag, Inc. and started as a consulting business

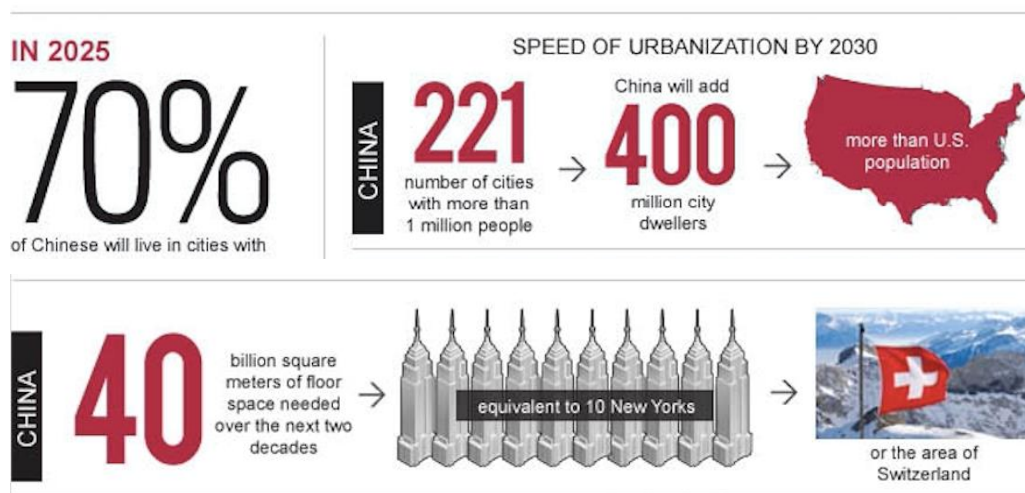
## Potential Catalysts

- Increased corporate visibility via management outreach, including conference attendance and other marketing strategies
- Acquiring businesses to expand services and addressable market
- Developing new innovative products and services to meet the demands of customers
- Increased international expansion and market share penetration
- Building new strategic partnerships to facilitate technology development
- Continued strong top line growth within Out-of-Home advertising market after the business transformation in 2017
- Optimizing and improving gross margins and operating margins via scale and integration efforts
- Larger financing at attractive terms, removing dilution risk

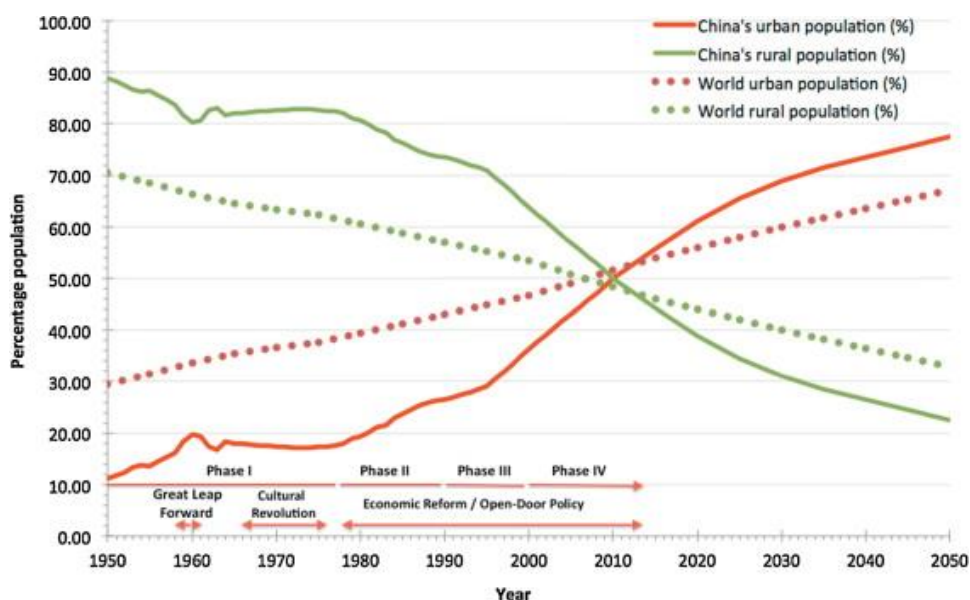
## Large Market Opportunity

Taoping operates in a large and growing market, as the demand for advertising placement and public information dissemination accelerates in line with rising urbanization in China. China's urbanization rate has accelerated in the past 30 years with the urban population growing by over 100 million in the past five years to more than 813 million in 2017. Approximately 70% of the Chinese population is expected to live in urban areas by 2035. According to the newest urbanization plan by China's State Council, the country will continue increasing investment in urban infrastructure, public service facilities, and affordable housing construction and projects new construction of 20,000 to 50,000 skyscrapers, as well as implementation of mass transit systems in more than 170 cities by 2025.

*The trend of urbanization increases residents' average commute time in the city, which brings huge opportunity for out-of-home advertisers*



Source: ChinaMike



Source: Science Direct



Because of urbanization, the number of elevators in China has increased sharply in recent years. According to the General Administration of Quality Supervision of China (AQSIQ), there have been 4.3 million elevators operating in the country, representing an average annual growth rate of 10%. Meanwhile, rising urbanization has resulted in prevalent traffic congestion. In medium to large sized cities, people spend on an average 39 minutes of commuting time getting to work, while in Beijing, which has over 20 million residents, the daily commute takes 52 minutes, which presents revenue generating opportunities for out-of-home advertisers who seek attentive audience at high traffic areas.



Source: Taoping Investor Presentation

Urban lifestyle revolves around consumption of information, goods, and services that necessitates advertising and public information dissemination. According to China Industry Information Net, the estimated total market size of China's out-of-home advertising is expected to reach RMB 190 billion in 2018, with a CAGR of 19%. Cosmetics, beverage, and financial service companies are ranked as top spenders consistently. Internet and real estate companies also increased their advertisement spending significantly.

Based on advertiser ratings, elevator space in commercial building and public transportation hubs are the top two prime locations for out-of-home advertising. There are over 200 million people riding elevators every day in China. Precision advertisement uses digital technologies, such as internet-based ads management and distribution and big data analysis, to target its audience, and continues to be advertisers' focal point, resulting in the increasing demand for digital advertising. Taoping is perfectly positioned to capitalize on the urbanization policies of China within the out-of-home advertising market. While China already has a sizable display advertising industry, few of the existing terminals are networked, and are

thus significantly under-utilized. Traditional advertising display terminals need to be updated manually by people onsite as no networks are connected to those display terminals. However, the rapid advancement in Internet and mobile technologies brings O2O (offline-to-online) opportunities. Taoping Inc. provides software such as Taoping App that can connect advertising agencies and their customers together, and support multiple functions: establishing new advertising projects, submitting advertisement proposals, remotely uploading, tracking and revising advertisement content, and processing payment online. Moreover, Taoping Inc. also announced that it plans to bring blockchain technology into its Taoping advertising ecosystem. Since blockchain technology is decentralized, it can add significant efficiencies to TAOP's network. By the end of 2018, TAOP's products and services will cover 100 prefecture cities and 200 million people. In the future, the company will continue to optimize distribution and build upon their established sales base and customers to sell new technologies within the strong top line growth out-of-home advertising market in China.

*Taoping targets the old system of updating advertising display terminals manually and makes the process of posting advertisements simple and real time*



*Taoping Inc. allows the targeting of customers at all points in their daily life*

Source: Company Website

## Competition

The digital out-of-home advertising market in China is highly competitive. The company faces competition from a large number of media and IT companies that provide ad hardware and services. The industry is characterized by frequent product introductions and rapid technological advancement. How to optimize and differentiate products and services becomes a key component of the industry. Unlike other competitors, Taoping provides integrated ecosystem solutions that combine technology platform, resource exchange and sharing, and big data services. The company's unique "Smart IoT Terminal - Taoping Net/App - Taoping e-Store" ecosystem makes the advertising business more instant and is leading the future within the advertising industry. By introducing big data service into traditional advertising industry, Taoping can provide value-added services to their customers and allow advertisers to customize ads to increase engagement and purchasing behavior, creating a virtuous cycle for demand for Taoping's terminals and services. In addition, the company has benefited from its well-planned market strategy. With strategic partnerships with Shenzhen Taoping New-Media Limited, Taoping founded and played a key role in Taoping Alliance, a new media operating organization including numerous advertising agencies throughout China, which greatly improved the company's market expansion capability and industry reputation. By the end of 2018, TAOP's products and services will cover 100 prefecture cities and 200 million people. *Taoping's strong reputation, advanced cloud services, and accurate big data advertising analytics enhance its competitive position.* According to the company and industry research, the major specific competitors include 56iq.com, Fujian Star-net Communication Co., Ltd, Shanghai View Show Technology Co., Ltd., and Maipu Communications Technology Co., Ltd. We believe Taoping is well positioned in the marketplace with its innovative new media ecosystem, extensive client network, accurate big data analytics and effective marketing strategy. Taoping positions itself as a leading cloud-based ad terminal and service provider that makes advertising and branding affordable and effective. *We view Taoping's pricing and overall product suite quality in combination distinctly positioning the business.*

*We view Taoping Inc. as well positioned with its unique innovative new media ecosystem in Out-of-Home advertising market in China*



Source: Diamond Equity Research Analysis

## Valuation

*Taoping is an early-stage technology company with few direct comparable companies. It is challenging to value Taoping using a single method of traditional valuation. In our comparable company analysis, we screened for small capitalization companies within the out-of-home advertising industry. We used a blend of these companies to arrive at a median enterprise value to revenue multiple. From our analysis, we have found the shares to be undervalued with significant upside if the company executes on the top line growth management anticipates. We arrive at a valuation of \$2 per share using our forecasted 2018 revenue and median enterprise value revenue multiple of 2.68x times revenue of Taoping's peer group.*

*Taoping appears undervalued using both comparable company analysis and discounted cash flow valuation methods*

### Comparable Company Analysis

Valuation	MCAP (USD)	EV (USD)	EV / Sales			EV / EBITDA			EV / EBIT			Price / Earnings		
			LTM	2016	2017	LTM	2016	2017	LTM	2016	2017	LTM	2016	2017
8243-HK Dahe Media	14	52	0.52x	-	-	4.7x	-	-	7.2x	-	-	2.9x	-	-
300038-CN Beijing Mileno Comm Tech	1,597	1,551	2.84x	10.67x	3.91x	12.6x	-	16.4x	13.5x	82.0x	19.5x	16.0x	46.3x	22.5x
300242-CN KAISA JiaYun Technology	405	433	0.82x	-	-	17.4x	-	-	18.8x	-	-	20.5x	-	-
1716-HK Most Kwai Chung	40	30	2.68x	-	-	8.1x	-	-	8.2x	-	-	-	-	-
600880-CN Chengdu B-Ray Media	643	569	4.94x	-	-	1629.0x	-	-	-	-	-	51.1x	74.0x	-
8202-HK Inno-Tech	40	56	13.23x	-	-	-	-	-	-	-	-	0.7x	-	-
300071-CN Spearhead Integ Marketing	400	572	1.13x	-	-	-	-	-	-	-	-	(10.2x)	-	-
Mean			3.74x	10.67x	3.91x	334.4x	-	16.4x	11.9x	82.0x	19.5x	13.5x	60.2x	22.5x
Median			2.68x	10.67x	3.91x	12.6x	-	16.4x	10.9x	82.0x	19.5x	9.4x	60.2x	22.5x

Source: Diamond Equity Research Analysis/ Factset Data Systems

Margins	FactSet Industry	Gross Income			EBITDA			EBIT			Net Income		
		LTM	2016	2017	LTM	2016	2017	LTM	2016	2017	LTM	2016	2017
8243-HK Dahe Media	Advertising/Marketing Services	16.7%	-	-	11.2%	-	-	7.3%	-	-	5.0%	-	-
300038-CN Beijing Mileno Comm Tech	Telecommunications Equipment	29.3%	30.6%	-	22.6%	-	23.8%	21.0%	13.0%	20.0%	17.8%	11.2%	17.7%
300242-CN KAISA JiaYun Technology	Electrical Products	9.6%	-	-	4.7%	-	-	4.4%	-	-	3.8%	-	-
1716-HK Most Kwai Chung	Broadcasting	-	-	-	-	-	-	-	-	-	-	-	-
600880-CN Chengdu B-Ray Media	Advertising/Marketing Services	24.0%	-	-	0.3%	-	-	-10.9%	-	-	10.4%	-	-
8202-HK Inno-Tech	Information Technology Services	-7.7%	-	-	-91.7%	-	-	-92.5%	-	-	1208.8%	-	-
300071-CN Spearhead Integ Marketing	Advertising/Marketing Services	18.9%	-	-	-4.7%	-	-	-5.0%	-	-	-8.0%	-	-
Mean		15.1%	30.6%	-	-9.6%	-	23.8%	-12.6%	13.0%	20.0%	206.3%	11.2%	17.7%
Median		17.8%	30.6%	-	2.5%	-	23.8%	-0.3%	13.0%	20.0%	7.7%	11.2%	17.7%

Source: Diamond Equity Research Analysis/ Factset Data Systems

Value Per Share	
Median Enterprise Value to Revenue	2.68x
2018E Revenue	\$ 28.51
Enterprise Value	\$ 76.42
Add: Cash and Equivalents	\$ 3.04
Less: Total Debt	\$ 7.28
Equity Value	\$ 72.18
Outstanding Shares	40.23
Valuation Per Share	\$ 2

Source: Diamond Equity Research Analysis/ Factset Data Systems

Given the uniqueness of Taoping's business model and the limited number of public companies to compare it to, we have built a standalone discounted cash flow analysis in order value the business (full assumptions in appendix). Given Taoping Inc. has a limited operating history, we built a top down model to value the business projecting the sales based on projected market share within digital out-of-home advertising market. *Our model indicates a fair value per share of \$2.*

(\$ in M)	FY16A	FY17A	FY18E	FY19E	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E
Operating Income (EBIT)	(14.58)	(0.45)	1.05	1.47	2.94	5.14	6.68	9.39	11.89	13.89
Less: CAPEX	3.46	3.78	2.85	3.92	5.00	5.84	6.81	7.95	9.29	10.85
Add: D & A	2.58	2.86	2.68	2.80	3.13	3.58	4.14	4.80	5.58	6.50
Current Assets excl. cash	11.89	18.26	15.48	21.30	27.14	31.68	36.98	43.18	50.43	58.90
Less: Current Liabilities	21.38	23.01	20.73	27.59	35.36	41.21	48.38	56.81	66.71	77.93
<b>Working Capital</b>	<b>(9.49)</b>	<b>(4.76)</b>	<b>(5.25)</b>	<b>(6.29)</b>	<b>(8.22)</b>	<b>(9.53)</b>	<b>(11.40)</b>	<b>(13.63)</b>	<b>(16.29)</b>	<b>(19.03)</b>
Increase/(Decrease) in Working Capital:		4.74	(0.50)	(1.04)	(1.93)	(1.31)	(1.87)	(2.23)	(2.66)	(2.74)
Less: Taxes	(0.06)	1.07	(0.34)	(0.47)	(0.87)	(1.44)	(1.86)	(2.57)	(3.23)	(3.77)
<b>Free Cash Flow for the Firm/Equity =</b>		<b>(7.18)</b>	<b>1.71</b>	<b>1.85</b>	<b>3.88</b>	<b>5.64</b>	<b>7.72</b>	<b>11.02</b>	<b>14.07</b>	<b>16.04</b>
Terminal Value =										160.04
<b>Present Value of Free Cash Flows =</b>			<b>1.61</b>	<b>1.54</b>	<b>2.84</b>	<b>3.64</b>	<b>4.40</b>	<b>5.54</b>	<b>6.24</b>	<b>68.91</b>

Source: Diamond Equity Research Analysis/ Taoping Financials

(\$ in M except per Share data)	
Total Present Value of Free Cash Flows =	94.7
Add: Cash & cash equivalents =	3.04
Less: P.V. of Total Debt o/s (as per latest filings) =	7.28
Less: Preferred Shares	-
Less: Minority Interest	-
<b>Equity Value (Present Value) =</b>	<b>90.48</b>
Number of Shares outstanding (in M)=	40.23
<b>Fair Value per Share (\$)=</b>	<b>2</b>

Source: Diamond Equity Research Analysis/ Factset Data Systems

Given the inherent assumptions in valuation models, we selected to use an average of our discounted cash flow valuation and our comparable company analysis valuation. **We arrive at a valuation of \$2 per share.**



## Experienced Management Team

*Taoping's management team and board of directors bring years of experience growing established companies and start-ups within information technology. We are encouraged especially by the blend of investment and related operational experience that the team brings*

**Jianghuai Lin (Chairman of the Board and Chief Executive Officer):** Mr. Lin has been the Chairman of Board of Directors and the Chief Executive Officer of the Company since 2006. Mr. Lin has also served as the Chairman and Chief Executive Officer of the Company's subsidiary, IST, since its incorporation in January 2006. During the period from September 2000 to June 2004, Mr. Lin served as the President and Chief Executive Officer of Hong Kong United Development Group, a consolidated enterprise engaging in investment, high technology, and education. Before that, during the period from February 1995 through August 2000, Mr. Lin was a Director and the General Manager of Fujian Wild Wolf Electronics Limited, a company engaged in the business of manufacturing electrical consumer products. Mr. Lin holds a master's degree in software engineering from Wuhan University and a bachelor degree in industrial accounting from Xiamen University.

*Taoping's management team and board of directors bring years of experience growing established companies and start-ups within information technology*

**Zhiqiang Zhao (President and Interim Chief Finance Officer):** Mr. Zhao has been the President of the Company since August 2015, Interim Chief Financial Officer since October 2015, and a member of Board of Directors since June 19, 2012. Mr. Zhao has extensive experience in corporate operations and integrations, strategic planning, and human resource management. From March 2003 to March 2005, Mr. Zhao served as Supervisor of Human Resources for the Foxconn Technology Group. From April 2005 to July 2006, Mr. Zhao served as Administrative and Human Resource Director of iASPEC; and as Deputy General Manager of iASPEC from July 2006 to August 2010. From November 2010, Mr. Zhao began serving as the Chief Operating Officer and Vice President of Taoping. From August 2010, he was vice chairman of iASPEC. From July 2011, Mr. Zhao served as General Manager of ISIOT (former HPC Electronics (Shenzhen) Ltd.). Mr. Zhao holds a bachelor's degree in mechanical & electrical from Inner Mongolia University.

**Zhixiong Huang (Chief Operating Officer):** Mr. Huang has been the Chief Operating Officer of the Company since August 2015. Between July 2001 and March 2002, Mr. Huang served as the General Manager of product development of Shenzhen Runsheng Information Systems Company Ltd. and was responsible for overseeing general operations. From September 2002 and October 2006, Mr. Huang served as the deputy general manager of iASPEC, where he supervised iASPEC's research and development activities and consulted on various sophisticated technical issues. From January 2006 to September 2013, he served as Taoping's vice president, and became Chief Technology Officer from December 2008 and September 2013. Mr. Huang holds a bachelor's degree in computer science from Hehai University in China and has over twenty years of experience in information systems. Mr. Huang is currently a Director of the

Shenzhen Computer Association, and an expert with the Shenzhen Expert Association and the Shenzhen Science and Technology Innovation Association.

**Guangzeng Chen (Chief Technology Officer):** Mr. Chen has served as Chief Technology Officer of the Company from December 1, 2015 and was Chief Product Officer since June 26, 2015. Mr. Chen joined the Company as Vice President of the Research & Development Division in March 2014. Prior to joining Taoping, Mr. Chen was a project manager at CoolPad Group Limited, a Shenzhen-based telecommunications equipment company that is one of the top ten smartphone manufacturing companies in China, from May 2011 to February 2014. Previously, Mr. Chen was the head of research and development at VideoHome, a Taiwanese multimedia appliance manufacturer and exporter, from June 2004 to May 2011. Mr. Chen graduated from Zhengzhou University with a bachelor's degree in Computer Science.

**Liqiong Yan (Assistant Chief Finance Officer):** Ms. Yan has served as the Director of Investor Relations Department and Assistant CFO in the Company since 2007. Ms. Yan has extensive experience in investor relations, capital operation and corporate governance. During her tenure, she successfully assisted Taoping in becoming a NASDAQ listed company and accomplishing several overseas equities financings. She also assisted the management layer in planning the overall development strategy, finance management and capital management strategy. Ms. Yan is a U.S. certified management accountant (CMA). She holds a master's degree in finance from Fudan University and a bachelor's degree in international economics from Beijing Normal University.

## Risk Factors

- TAOP may not be able to achieve sustainable profitability because of their limited history and limited operating experience in selling cloud-based products to the private sector
- Independent auditors have raised substantial concerns on TAOP's ability to continue as a business despite their reported positive cash flows in financial statements
- TAOP's revenue growth largely depends on consumers' demand for Out-of-Home digital advertising and internet related services. If unfavorable economic conditions and technical problems arise, TAOP's digital advertising strategy may be affected
- TAOP's operating results can fluctuate significantly, according to customers' preferences and currency fluctuations, as well as other factors
- The company's acquisitions may not perform as expected
- TAOP may fail to maintain relationships or expand relationships with current clients, with many of their contracts not containing exclusivity clauses
- TAOP's Chairman and CEO, Mr. Jianghuai Lin, owns 41.6% of the outstanding ordinary shares and 100% of the equity interests in iASPEC. Conflicts of interest may arise affect the stock performance
- TAOP's operations may be affected by the PRC government's future regulations. As the PRC government exercises significant control over China, changes in the economic and political policies of the PRC government may harm TAOP's results
- Investors may not be able to enforce judgements against TAOP in U.S. courts' and hold the company to U.S. federal securities laws because most of their assets are located outside of the U.S. and most of the key officers in TAOP are nationals and residents of countries other than the U.S.
- If TAOP fails to comply with the continued listing requirements of NASDAQ, TAOP may be delisted
- The company has limited insurance coverage for its products in China. The products for insurance in China are limited and it is still a nascent industry
- The company may be affected by security breaches, as they offer a cloud based solution

***These Risk Factors Are Not Comprehensive. For Full List of Risk Factors Please Read Taoping, Inc.'s Latest Prospectus and/or Annual Filings***

## Appendix

### Income Statement:

#### TAOP : P&L

FY Ends on December 31

(\$ in M)	FY15A	FY16A	FY17A	FY18E	FY19E	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E
<b>REVENUE</b>											
Revenue from Cont Ops	10.28	10.19	18.19	28.51	39.24	50.00	58.36	68.12	79.54	92.89	108.50
Cost - CBT Segment	3.56	5.20	9.10	14.26	19.62	24.50	28.01	32.02	36.59	41.80	48.83
Cost - TIT Segment	2.82	2.41	0.77	0.50	1.65	2.10	2.45	2.86	3.34	3.90	4.56
<b>Total Cost</b>	<b>6.38</b>	<b>7.61</b>	<b>9.87</b>	<b>14.76</b>	<b>21.27</b>	<b>26.60</b>	<b>30.46</b>	<b>34.88</b>	<b>39.93</b>	<b>45.70</b>	<b>53.38</b>
<b>Gross Profit</b>	<b>3.90</b>	<b>2.59</b>	<b>8.32</b>	<b>13.76</b>	<b>17.97</b>	<b>23.40</b>	<b>27.89</b>	<b>33.24</b>	<b>39.61</b>	<b>47.19</b>	<b>55.12</b>
Administrative Expenses	11.22	8.34	3.62	5.39	7.03	8.46	8.75	10.22	11.93	13.93	16.28
Research & Development Expenses	3.45	3.04	4.03	5.70	7.46	9.50	11.09	12.94	14.32	16.72	19.53
Selling Expenses	2.66	1.33	1.12	1.61	2.02	2.50	2.92	3.41	3.98	4.64	5.43
Impairment of Property, Plant & Equipment	4.62	-	-	-	-	-	-	-	-	-	-
Impairment of Intangible Assets & Goodwill	8.92	4.44	-	-	-	-	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>30.87</b>	<b>17.16</b>	<b>8.77</b>	<b>12.71</b>	<b>16.51</b>	<b>20.46</b>	<b>22.76</b>	<b>26.57</b>	<b>30.23</b>	<b>35.30</b>	<b>41.23</b>
<b>Adj. EBIT</b>	<b>(26.96)</b>	<b>(14.58)</b>	<b>(0.45)</b>	<b>1.05</b>	<b>1.47</b>	<b>2.94</b>	<b>5.14</b>	<b>6.68</b>	<b>9.39</b>	<b>11.89</b>	<b>13.89</b>
D&A	2.54	2.58	2.86	2.68	2.80	3.13	3.58	4.14	4.80	5.58	6.50
<b>Adj. EBITDA</b>	<b>(24.42)</b>	<b>(12.00)</b>	<b>2.41</b>	<b>3.73</b>	<b>4.26</b>	<b>6.08</b>	<b>8.72</b>	<b>10.81</b>	<b>14.18</b>	<b>17.47</b>	<b>20.38</b>
Subsidy Income	0.50	0.22	0.48	0.74	1.02	1.30	1.52	1.77	2.07	2.42	2.82
Gain on Sale of Assets	29.99	-	-	-	-	-	-	-	-	-	-
Loss on Disposal of Consolidated Entities	-	(0.58)	-	-	-	-	-	-	-	-	-
Loss on Sale of Deposits for Land Use Right	-	(2.76)	-	-	-	-	-	-	-	-	-
Other Income (loss), net	0.78	(0.33)	0.28	0.43	0.59	0.75	0.88	1.02	1.19	1.39	1.63
Interest Income	0.08	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest Expense	(3.12)	(0.50)	(0.45)	(0.86)	(1.18)	(1.50)	(1.75)	(2.04)	(2.39)	(2.79)	(3.26)
Change in Fair Value of Warrant Liability	(5.66)	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Adj. PBT</b>	<b>(4.39)</b>	<b>(18.47)</b>	<b>(0.13)</b>	<b>1.36</b>	<b>1.90</b>	<b>3.49</b>	<b>5.78</b>	<b>7.43</b>	<b>10.26</b>	<b>12.91</b>	<b>15.08</b>
Income Tax Benefit (Expenses)	(4.31)	(0.06)	1.07	(0.34)	(0.47)	(0.87)	(1.44)	(1.86)	(2.57)	(3.23)	(3.77)
<b>Adj. Net Profit/(Loss) from Continuing operations</b>	<b>(8.69)</b>	<b>(18.52)</b>	<b>0.94</b>	<b>1.02</b>	<b>1.42</b>	<b>2.62</b>	<b>4.33</b>	<b>5.57</b>	<b>7.70</b>	<b>9.68</b>	<b>11.31</b>
<b>Adj. Net Profit/(Loss) from Discontinued operations</b>	<b>1.50</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net Income (Loss)</b>	<b>(7.20)</b>	<b>(18.52)</b>	<b>0.94</b>	<b>1.02</b>	<b>1.42</b>	<b>2.62</b>	<b>4.33</b>	<b>5.57</b>	<b>7.70</b>	<b>9.68</b>	<b>11.31</b>
Net (Income) Loss attributable to non-controlling interest	(0.31)	0.35	(0.08)	-	-	-	-	-	-	-	-
<b>Adj. Net Income (Loss) Attributable To Common Shareholders</b>	<b>(7.50)</b>	<b>(18.17)</b>	<b>0.86</b>	<b>1.02</b>	<b>1.42</b>	<b>2.62</b>	<b>4.33</b>	<b>5.57</b>	<b>7.70</b>	<b>9.68</b>	<b>11.31</b>
<b>Earnings per Share (Adjusted) from Cont Ops (in \$)</b>											
Basic	(0.22)	(0.45)	0.02	0.02	0.03	0.06	0.09	0.12	0.16	0.20	0.23
Diluted	(0.22)	(0.45)	0.02	0.02	0.03	0.06	0.09	0.12	0.16	0.20	0.23
<b>Weighted Average no. of Shares outstanding (in M)</b>											
Basic	34.48	40.18	40.23	41.23	42.23	45.23	46.23	47.23	47.73	48.23	48.73
Diluted	34.48	40.18	40.33	41.93	42.23	45.23	46.23	47.23	47.73	48.23	48.73

## Financial Model Assumptions:

### Revenue:

For the forecast period in our financial model, we have derived revenue based on

#### (i) Expected revenue from CBT Segment

According to [Research and Markets](#) (Aug'18), the global digital out-of-home advertising market is estimated to reach \$11.33 billion in 2023, increasing from \$6.04 billion in 2017 at a compound annual growth rate (CAGR) of 11.04% during the forecast period. Our assumptions for Taoping's revenue from CBT segment assume the Company's revenue contribution to the total advertising market will rise from 0.28% in FY17 to 0.77% by 2025. This will likely be attributable to the rapidly rising demand of the Company's unique and diversified product portfolio in the global digital out-of-home advertising market. Thus, we project top line sales growth of approximately 61.41% in FY18 which is expected to gradually decline to 17.00% by FY25.

#### (ii) Expected revenue from TIT Segment

We expect revenue from TIT segment will decline slightly to \$1.15 million by FY19 and then keep increasing at an annual rate of 5% from \$1.21 million in FY20 to \$1.55million by FY25, as the company will focus more on CBT segment in the future.

Based on sales and price forecasts, we project the total revenue to increase from \$28.51 million in FY18 to \$108.50 million in FY25.

	FY15A	FY16A	FY17A	FY18F	FY19F	FY20F	FY21F	FY22F	FY23F	FY24F	FY25F
<b>CBT Segment</b>											
Global Digital OOH Advertising Market (\$ in M)	\$ 4,901.10	\$ 5,442.18	\$ 6,043.00	\$ 6,710.15	\$ 7,450.95	\$ 8,273.53	\$ 9,186.93	\$ 10,201.17	\$ 11,327.38	\$ 12,577.92	\$ 13,966.52
Market Growth Rate			11.04%	11.04%	11.04%	11.04%	11.04%	11.04%	11.04%	11.04%	11.04%
Company Market Share	0.15%	0.16%	0.28%	0.41%	0.51%	0.59%	0.62%	0.65%	0.69%	0.73%	0.77%
Market Share Growth Rate		7.18%	75.37%	45.37%	25.37%	15.37%	5.37%	5.37%	5.37%	5.37%	5.37%
Revenue - CBT Segment (\$ in M)	\$ 7.31	\$ 8.70	\$ 16.95	\$ 27.36	\$ 38.09	\$ 48.79	\$ 57.08	\$ 66.78	\$ 78.14	\$ 91.42	\$ 106.96
y/y growth		19.02%	94.73%	61.41%	39.21%	28.10%	17.00%	17.00%	17.00%	17.00%	17.00%
<b>TIT Segment</b>											
Growth Assumption		-49.89%	-16.78%	-6.78%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Revenue - TIT Segment (\$ in M)	\$ 2.97	\$ 1.49	\$ 1.24	\$ 1.15	\$ 1.15	\$ 1.21	\$ 1.27	\$ 1.34	\$ 1.40	\$ 1.47	\$ 1.55
TOTAL REVENUE (\$ in M)	\$ 10.28	\$ 10.19	\$ 18.19	\$ 28.51	\$ 39.24	\$ 50.00	\$ 58.36	\$ 68.12	\$ 79.54	\$ 92.89	\$ 108.50

Source: Diamond Equity Research Analysis/Research and Markets

### Gross Margins:

We have assumed gross margins to be very close to 50.8% during the forecasting period. Our assumptions for each year are outlined below:

Gross Margin	
Period	Assumption rate
FY18	48.2%
FY19	45.8%



FY20	46.8%
FY21	47.8%
FY22	48.8%
FY23	49.8%
FY24	50.8%
FY25	50.8%

### Operating Expenses:

#### i. General & Administration (G&A) Expenses:

For FY18, we expect the G&A expenses (as a % of sales) to be close to 18.9%, substantially lower than fiscal 2017 results. It is expected to decline to 15.0% by FY25, as the company further optimizes its infrastructure.

#### G&A Expenses (as a % of Sales)

Period	Assumption rate
FY18	18.9%
FY19	17.9%
FY20	16.9%
FY21	15.0%
FY22	15.0%
FY23	15.0%
FY24	15.0%
FY25	15.0%

#### ii. Research & Development (R&D) Expenses:

We have assumed the Company's R&D expenses (as a % of sales) for FY18 to be 20.0% and it is expected to decline to 18.0% by FY25, as the company improves its efficiency creating new products.

#### R&D Expenses (as a % of Sales)

Period	Assumption rate
FY18	20.0%
FY19	19.0%
FY20	19.0%

FY21	19.0%
FY22	19.0%
FY23	18.0%
FY24	18.0%
FY25	18.0%

### iii. Depreciation & Amortization

In our model, we have assumed depreciation will average approximately 15.0% of property, plant & equipment (PP&E) during the forecast period. For the same period, amortization has been modelled at 50.0% on the beginning balance of intangibles.

### iv. Financial Expenses:

We have calculated cost of debt by considering LTM interest expenses and short-term debt and convertible bonds (short-term) outstanding on the balance sheet.

### Tax rate:

From FY18 onwards, we have assumed an effective tax rate of 25%.

### Capex:

For the forecast period, we assume the company's capital expenditure requirement on property, plant & equipment (PP&E) to be close to 1.8x of depreciation, while on intangibles to reach 1.14x of amortization.

### Days Inventory Held:

We have assumed inventory days held to keep 7.0 days in FY18 to FY25 as similar products arrive in the market.

### Short-Term Debt:

In our model, we have assumed the Company will raise funds primarily via short-term debt.

### WACC in DCF:

**Risk premium:** We have used S&P Composite 1500 Information Technology Index as the best proxy of the market index for Taoping Inc.

- Risk free rate: We have used 10-year US Treasury rate.
- Beta: 0.91. Based on the average of the comparable companies.

Cost of Debt: Interest rate on debt has been assumed at 10.0% in line with the effective interest rate mentioned in the company's most recent financials.

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