

Section 5: Electronics and Electrical Appliances Industry

Activities	Conditions	Incentives
<p>5.1 Manufacture of electrical products</p> <p>5.1.1 Manufacture of advanced technology electrical products</p> <p>5.1.2 Manufacture of air conditioners, refrigerators, freezers, washing and drying machines</p> <p>5.1.3 Manufacture of other electrical products</p>	<p>1. The electrical products must be able to connect to Internet of Things; or</p> <p>2. The electrical products must have circuits or operation control systems, processing systems, embedded systems or embedded software to allow for more complex or variety of functions</p> <p>Products must meet Thailand's Energy Efficiency Standards and have the High Energy Efficiency Label (Label No. 5) from the Ministry of Energy or other equivalent standards from acknowledged institutions.</p>	<p>A 3</p> <p>A 4</p> <p>B 1</p>
<p>5.2 Manufacture of parts and/or equipment used for electrical products</p> <p>5.2.1 Manufacture of power inverters</p> <p>5.2.1.1 Manufacture of power inverters for industrial use</p> <p>5.2.1.2 Manufacture of other power inverters</p>	<p>Product design must be included in the manufacturing process.</p>	<p>A 3</p> <p>A 4</p>

Activities		Conditions	Incentives
5.2.2	Manufacture of LED lamps	<ol style="list-style-type: none"> 1. The compressors must be for air conditioners, freezers, refrigerators that meet the Energy Efficiency Standards and have the High Energy Efficiency Label (Label No. 5) from the Ministry of Energy or other equivalent standards from acknowledged institutions. 2. For the production of motors, product design must be included in the manufacturing process. 	A 4
5.2.3	Manufacture of compressors and/or motors for electrical appliances		A 4
5.2.4	Manufacture of wire harnesses		B 1
5.2.5	Manufacture of parts and/or equipment for other electrical products		B 1
5.3	Manufacture of electronic products		
5.3.1	Manufacture of organic and printed electronics (OPE)		A 2
5.3.2	Manufacture of telecommunication products		
5.3.2.1	Manufacture of emission, transmission and reception devices used in fiber-optic and wireless communication systems		A 2
5.3.2.2	Manufacture of other telecommunication products		A 3
5.3.3	Manufacture of electronic control and measurement instruments for industrial/agricultural use		A 2
5.3.4	Manufacture of security control equipment		A 2
5.3.5	Manufacture of audio visual products		A 4

Activities	Conditions	Incentives
5.3.6 Manufacture of office electronics		A 4
5.3.7 Manufacture of other electronic products		B 1
5.4 Manufacture of parts and/or equipment used for electronic products 5.4.1 Manufacture of parts for organic and printed electronics (OPE) 5.4.2 Manufacture of solar cells and/or raw materials for solar cells 5.4.3 Manufacture of parts for telecommunication products 5.4.3.1 Manufacture of parts for emission, transmission and reception devices used in fiber-optic and wireless communication systems 5.4.3.2 Manufacture of parts for other telecommunication products 5.4.4 Manufacture of parts for electronic control and measurement instruments for industrial/agricultural use, medical/scientific devices and automotive industry 5.4.5 Manufacture of parts for security control equipment	The manufacturing process and energy yield for the production of solar cells must be approved by the Board.	A 2 A 2 A 2 A 3 A 2 A 2

Activities	Conditions	Incentives
5.4.6 Manufacture of hard disk drive and/or parts for hard disk drive		
5.4.6.1 Manufacture of advanced technology hard disk drives and/or parts (excluding top covers, base plates or peripherals)	<ol style="list-style-type: none"> 1. The areal density of hard disk drives must not be less than 2,000 gigabits per square inch. 2. The cost of refurbishment of existing machines shall be regarded as an investment and will be taken into account in the calculation of corporate income tax exemption cap. The original cost of existing machines shall not be regarded as an investment. 	A 2
5.4.6.2 Manufacture of hard disk drives and/or parts (excluding top covers, base plates or peripherals)	The cost of refurbishment of existing machines shall be regarded as an investment and will be taken into account in the calculation of corporate income tax exemption cap. The original cost of existing machines shall not be regarded as an investment.	A 3
5.4.6.3 Manufacture of top covers, base plates or peripherals for hard disk drives		A 4
5.4.7 Manufacture of solid state drives and/or parts for solid state drives	The cost of refurbishment of existing machines shall be regarded as an investment and will be taken into account in the calculation of corporate income tax exemption cap. The original cost of existing machines shall not be regarded as an investment.	A 2
5.4.8 Manufacture of parts and/or equipment for solar-powered products		A 3
5.4.9 Manufacture of semiconductors and/or parts for semiconductors	For the production of integrated circuits, the cost of refurbishment of existing machines shall be regarded as an investment and will be taken into account in the calculation of corporate income tax exemption cap. The original cost of existing machines shall not be regarded as an investment	A 3

Activities	Conditions	Incentives
5.4.10 Manufacture of equipment and/or parts for photonic devices and/or for photonic integrated systems		A 3
5.4.11 Manufacture of flat panel displays	The manufacturing processes must be approved by the Board.	A 3
5.4.12 Manufacture of flexible printed circuits and/or multi-layer printed circuit boards and/or parts	The manufacturing processes must be approved by the Board.	A 3
5.4.13 Manufacture of other memory storage equipment		A 4
5.4.14 Manufacture of printed circuit board assembly (PCBA)		A 4
5.4.15 Manufacture of electro-magnetic products		A 4
5.4.16 Manufacture of passive components		A 4
5.4.17 Manufacture of parts for audio visual products		A 4
5.4.18 Manufacture of parts for office electronics		A 4
5.4.19 Manufacture of parts for other electronic products		B 1
5.5 Manufacture of material for microelectronics 5.5.1 Manufacture of wafers 5.5.2 Manufacture of material based	1. The manufacturing processes must be approved by the Board. 2. The cost of refurbishment of existing machines shall be regarded as an investment and will be taken into account in the calculation of corporate income tax exemption cap. The original cost of used machines shall not be regarded as an investment.	A 2 A 3

Activities		Conditions	Incentives
5.6	Electronics design		
5.6.1	Microelectronics design	1. Projects must have expenses for salaries for electronics design personnel of at least 1,500,000 baht per year.	A 1
5.6.2	Embedded system design	2. Revenue derived from sales or the provision of services that are directly related to a promoted business or which are from downstream production for commercial purposes, either carried by the promoted companies or sub-contractors, shall be regarded as revenue of such promoted businesses. 3. If located in a science and technology park promoted by the Board, 50 percent of the corporate income tax shall be reduced for 5 years after the expiration of the regular tax exemption period.	A 1
5.7	Software		
5.7.1	Embedded software	1. Projects must have expenses for salaries for IT-personnel of at least 1,500,000 baht per year.	A
5.7.2	Enterprise software and/or digital content	2. Projects must include software development processes specified by the Software Industry Promotion Agency (SIPA). 3. Projects with an investment of 10 million baht or more (excluding cost of land and working capital) must obtain a quality standard certificate from SIPA or receive a Capability Maturity Model Integration (CMMI) quality standard certificate or any equivalent standard within two years from the full operation start-up date. If the project fails to meet such conditions, one-year of the corporate income tax exemption shall be withdrawn. 4. Revenue derived from sales or the provision of services that are directly related to a promoted software business shall be regarded as revenue of such promoted businesses.	A 3 (not subject to the corporate income tax exemption cap)
5.7.3	High Value-Added Software - Develop and provide analysis and data	1. Projects must have expenses for salaries for IT-personnel of at least 1,500,000 baht per year.	A 1

Activities	Conditions	Incentives
<p>management software services, including big data, data analytics and predictive analytics software</p> <ul style="list-style-type: none"> - Develop information security and cyber security software - Develop system software for advanced-technology devices, including business process management - Develop industrial software used to support manufacturing 	<ol style="list-style-type: none"> 2. Projects must include software development processes as specified or approved by the Software Industry Promotion Agency (SIPA). 3. Projects with an investment of 10 million baht or more (excluding cost of land and working capital) must obtain a quality standard certificate from SIPA or receive a Capability Maturity Model Integration (CMMI) quality standard certificate or any equivalent standard within two years from the full operation startup date. If the project fails to meet such conditions, one-year corporate income tax exemption shall be withdrawn. 4. Revenue derived from sales or the provision of services that are directly related to a promoted software business shall be regarded as revenue of such promoted businesses. 	
5.8 E-commerce	Not eligible for merit-based incentives.	B 2
<p>5.9 Digital Services</p> <ul style="list-style-type: none"> - Software platform - Managed service - Digital architecture design service - Digital services such as FinTech, DigiTech, MedTech, AgriTech, etc. 	<ol style="list-style-type: none"> 1. Projects must hire digital specialists and have capital investment (excluding cost of land and working capital) not less than 1,000,000 baht. 2. Projects must include digital service processes as approved by the Board. 3. Projects with an investment of 10 million baht or more (excluding cost of land and working capital) must be certified with ISO 20000 or other quality standard certificate as approved by the Ministry of Information and Communication Technology within 2 years from the full operation start-up date, otherwise the corporate income tax exemption shall be reduced by 1 year. 4. Revenue derived from sales or the provision of services that are directly related to a promoted digital service business shall be regarded as revenue of such promoted businesses. 5. Projects must gain approval from the Ministry of Information and Communication Technology before applying for investment promotion. 	A 3