NAFTA

AND

THE ELECTRONIC COMPONENTS SECTOR

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NAFTA
AND THE ELECTRONIC COMPONENTS SECTOR

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Contents

NAFTA AND THE CANADIAN ELECTRONIC COMPONENTS SECTOR

The North American Free Trade Agreement (NAFTA) came into effect January 1, 1994. The overall objective of this Agreement is to promote employment and economic growth by expanding trade and investment opportunities in the North American free trade area and by enhancing the competitiveness of Canadian, Mexican and U.S. companies in global markets.

NAFTA provides Canadian manufacturers of electronic components with continued preferential access to U.S. markets and new preferential access to Mexico. The Mexican market for electronic components is expected to experience rapid growth as the private sector and governments upgrade their telecommunications and computer systems.

To make the most of these opportunities, you should first understand how the Agreement affects you and your business operations. Second, you should assess your strategic business plans and determine whether and how your production and marketing practices might need to be altered as a result of NAFTA.

This booklet highlights key aspects of the Agreement for Canadian manufacturers of electronic components including printed circuit boards, cathode ray tubes, transformers and power supplies. It provides product-specific information on tariff rates, tariff phase-outs and rules of origin, and it describes other provisions of the Agreement relevant to manufacturers and distributors of these products. It also provides an overview of the electronic component market in North America and highlights potential new market opportunities in Mexico.

TARIFFS FOR ELECTRONIC COMPONENTS

Under NAFTA, the three countries agreed to an immediate or a five-year elimination of tariffs for most electronic components. Virtually all tariffs on electronic components being traded between Canada, the United States and Mexico will be eliminated by January 1, 1998.

In addition, NAFTA provides for the elimination by the three countries of tariffs on certain electronic components (e.g. computer power supplies, semiconductor devices, integrated circuits) imported from any country. These reductions are to be made immediately or over a five year period beginning January 1, 1999.

Canada-United States Tariffs

Trade between the United States and Canada will continue to be governed by the tariff phase-outs negotiated under the provisions of the Canada-United States Free Trade Agreement (FTA). These phase-out schedules are unaffected by NAFTA. Under the FTA, tariffs for all electronic components have already been reduced by at least 60 percent and all tariffs will be eliminated by January 1, 1998.

Schedule of Phase-Outs

Annex A contains a product-specific listing of the Mexican and Canadian tariff elimination schedules for most electronic components. The applicable tariff phase-out stages for other products and inputs are listed in the country-specific NAFTA tariff schedules.

A review of the Canadian and Mexican tariff phase-outs for your products will assist you in assessing the potential impact of NAFTA on your company.

Mexican Phase-Outs

Mexican import tariffs for most electronic components were between 10 and 15 percent. Most were eliminated immediately on implementation of the Agreement on January 1, 1994. Included were the tariffs on such items as capacitors, tubes, and a variety of semiconductor devices (e.g. diodes, transistors, thyristors, piezo-electric crystals).

The tariffs on most other electronic components will be eliminated by January 1, 1998. The tariffs on a few electronic components (e.g. certain inductors and their parts, capacitors and resistors) will be eliminated in 10 annual reductions ending on January 1, 2003.

Canadian Phase-Outs

Canadian import tariffs for most Mexican-produced electronic components were also eliminated immediately. These included tariffs on virtually all capacitors, resistors, tubes and semiconductors.

Canadian tariffs will be eliminated over five years on goods such as printed circuits, and certain inductors and capacitors.

Treatment of Jointly Produced Goods

NAFTA protects Canadian electronic component companies from inappropriate reductions in Canadian tariffs applied to goods jointly produced in the United States and Mexico. Such goods will generally face higher rates of duty when entering Canada than goods that are wholly produced in Mexico. The applicable base tariff rates for jointly produced goods are shown in brackets in Annex A.

Accelerated Duty Elimination

As with the FTA, there is an acceleration clause in NAFTA. Tariffs for electronic components may be phased out faster than originally negotiated if the three countries agree to such action. If only two countries agree, acceleration takes place only between those two.

Rules of Origin for Electronic Components

NAFTA provides preferential tariff treatment for all "originating" North American goods traded between Canada, the United States and Mexico. Rules of origin are used to determine whether a product qualifies as a good originating in North America. These rules ensure that NAFTA benefits are only available for goods substantively produced or transformed in North America.

Any goods produced in any or all of the three NAFTA countries, with components and materials that themselves are wholly sourced or manufactured in any of the three countries, qualify as originating goods entitled to preferential tariff treatment.

Goods using non-North American inputs must meet the requirements set out in the NAFTA rules of origin to be considered as "originating."

The NAFTA rules of origin for electronic components set out the following requirements:

- Each non-North American input must undergo sufficient transformation during production in one or more of the NAFTA countries to result in a specified change of tariff classification.
- When certain parts of non-North American origin are used in the production of a good, the manufacturer may be required to meet a value-content test.

The specific rule of origin for each product sets out the required tariff classification change and indicates when a value-content test is required. The product-specific rules of origin applicable to most electronic components are found in Annex B.

How NAFTA Rules Differ from the FTA Rules

NAFTA introduces significant changes to the rules of origin for electronic components, notably, the elimination of the value content requirement of the FTA, which was applicable to most electronic components.

The NAFTA rules of origin build on the rules that were developed for the FTA. Canadian exporters will find the NAFTA rules clearer, more predictable and more flexible. The format for these rules is more detailed and user-friendly.

In addition to the changes in the product-specific rules, NAFTA has introduced new provisions of general application that may assist some Canadian exporters of electronic components. Notable changes include:

- **Easier, more flexible methods to calculate regional value content.** Regional value content for most goods may now be calculated by means of either a "net-cost" method or a new "transaction-value" method. In addition to providing producers with greater flexibility, this corrects the ambiguities experienced with the regional value content formula under the FTA. Producers who choose to use the "transaction-value" method will be able to avoid the need to maintain the cost-accounting systems required under the FTA and the "net-cost" method. The methods of calculating regional value content are described in Annex C.
- **The introduction of a *de minimis* rule.** Under NAFTA, a good is determined to originate in North America if the value of non-North American materials that fail to meet the specific rule of origin is no more than 7 percent of the transaction value or total cost of the good. This provision will be of particular interest to exporters whose products incorporate limited amounts of non-North American inputs. It can enable goods that otherwise might not qualify to qualify, or it can eliminate the imposition of the value content requirement for such goods.

Producers of goods subject to a regional value content requirement should carefully examine the new NAFTA methods of calculation. This is particularly important for firms that either barely met or that failed to meet the FTA requirements.

How to Use the Rules of Origin

If you export to the United States or Mexico, you should verify that your products qualify for NAFTA tariff preference. The following steps should assist your review.

- **Step 1.** If your good is manufactured in Canada using inputs wholly sourced or manufactured in North America it qualifies as "originating" and is entitled to preferential tariff treatment when exported to the United States or Mexico.

  Exporters should be careful when determining whether their inputs are North American. Inputs purchased from North American suppliers are not necessarily North American, as they may have been produced or imported from non-North American sources.
- **Step 2.** If your good uses non-North American inputs, you must identify the tariff classification for the good and for any non-North American inputs. Should you have difficulties determining the tariff classification, contact the appropriate customs agencies identified in this booklet.

- **Step 3.** Look up the specific rule of origin for your product in Annex B or in the NAFTA text. As the rules will make mention of tariff chapters, headings, subheadings and items, some understanding of the classification system is necessary. A tariff item has eight digits. The first two digits identify its chapter, the first four digits the heading and the first six digits the subheading of the good.
- **Step 4.** In most cases, a rule will indicate what changes in tariff classification must occur between each of the non-North American inputs and the finished good. It will read something like "a change to heading (XXXX) from any other heading, except heading (YYYY)." The first number refers to the good, the second number to excluded inputs. As long as all non-North American inputs come from permitted headings or subheadings, the good qualifies.
- **Step 5.** Usually, if the rule precludes the use of certain non-North American inputs, there will be an alternative rule permitting such changes if a value-content test is met. It will read something like "a change to heading (XXXX) from heading (YYYY) provided there is a regional value content of not less than..." In these cases a producer must calculate the regional value content in accordance with one of the two methods specified in NAFTA. Annex C describes the two methods of calculating regional value content.

An Example

A Canadian producer of variable resistors uses imported copper wire from France and control elements from Germany.

Since some non-North American inputs are used, these resistors do not automatically qualify as originating. The product-specific rule must be used.

The producer determines that variable resistors are classified under tariff subheading 8533.40. The non-North American parts fall under subheadings 7408.19 and 8533.90, respectively. The control elements are classified under Canadian tariff item 8533.90.11.

The rule of origin for subheading 8533.40 requires "a change to subheading 8533.40 from any other subheading, except from Canadian tariff item 8533.90.11." In this example, the resistors in question would not qualify, as the control elements are classified under tariff item 8533.90.11.

Under the *de minimis* provision, however, if the value of the control element was no more than 7 percent of the value of the finished resistor, the good would qualify.

Additional Information

More detailed information on the NAFTA rules of origin is contained in the following publications:

Guide to Rules of Origin and Customs Procedures for Canadian Exporters to the U.S. Market, available through InfoEx at 1-800-267-8376;

Trilateral Customs Guide to NAFTA, and *NAFTA Rules of Origin — A Step by Step Guide,* available from Revenue Canada, Customs Infoline (613) 941-0965 Fax: (613) 941-8138.

While all firms exporting to the United States or Mexico should obtain copies of these publications, they will be particularly useful for firms whose products are subject to a value content requirement.

NAFTA Customs Matters

Classification and Origin Determination

The tariff classification and origin status of your products should be determined before you start exporting.

- Advisory classifications and origin determinations may be obtained from your customs broker or from one of the three customs agencies listed at the end of this publication.
- Written, binding rulings on classification, origin status and marking requirements may now be obtained in advance from Canadian, U.S. and Mexican customs headquarters.

Rulings must be obtained from the country into which you are shipping your goods. Contacts for these are listed at the end of this publication.

Customs Administration

From experience gained in the Canada-United States Free Trade Agreement, governments learned the importance of precisely describing and agreeing upon various customs administration procedures.

NAFTA contains a number of provisions that address some of the difficulties experienced by governments, importers and exporters. These include the following:

- uniform regulations to ensure consistent interpretation, application and administration of the rules of origin, and other customs administration matters;
- common record keeping requirements, a uniform Certificate of Origin, and standardized certification requirements;
- broader rights of appeal of determinations of origin and advance rulings to allow appeals by both the exporter and importer within the NAFTA area; and
- the creation and regular meetings of trilateral working groups to address future modification of the rules of origin, marking obligations and uniform customs regulations, and to review controversial customs issues.

Country of Origin Marking Requirements

The United States and Mexico both require that imports be marked to indicate to the purchaser the country of origin. Goods incorrectly marked can be held at the border. To provide greater clarity and certainty to exporters, NAFTA provides for uniform standards on how goods are to be marked.

Method of Marking

The country of origin of a good must be marked legibly and conspicuously and must be placed where it can be easily seen during normal handling.

Marking must be sufficiently permanent to remain in place unless deliberately removed. Acceptable marking methods include stampings, mouldings, stickers, labels, tags and paint.

Imports do not have to be marked with their country of origin when:

- the cost of marking would discourage importation;
- marking would materially impair the function of the good;
- marking would substantially detract from its appearance;
- the good is a crude substance; or
- the importer will substantively transform the good.

Country of Origin

NAFTA provides for very precise and detailed rules on how the country of origin of a good is to be determined. However, almost all goods manufactured in Canada that qualify for NAFTA tariff preference can be marked as originating in Canada.

Firms that only do minor processing, simple assembly or blending of imported inputs or those whose goods do not meet the NAFTA rule of origin should carefully check the marking rules of the country into which they are exporting. Their product may be able to be marked as a product of Canada, but in some cases it must be marked as a product of the country from which the inputs originate.

If there is doubt as to how to correctly mark a product, exporters can request an advance ruling from the importing country. A listing of the customs agencies is included in the contacts section of this publication.

WHAT ELSE YOU SHOULD KNOW

While the following provisions of the Agreement may not be specific to the electronic components industry, they nonetheless affect the overall North American trading environment and are of interest to companies participating in it.

Temporary Entry for Business Purposes

Canadian manufacturers of electronic components will be able to use NAFTA temporary entry provisions to facilitate travel necessary to promote the sales of goods in the United States and Mexico. Such "business visitors" are required to carry proof that they are citizens of one of the NAFTA countries, and a letter from their employer indicating the nature of their visit, their principal place of employment and the actual place of accrual of profits.

Sales representatives may bring commercial samples, advertising materials and equipment necessary to carry out the business activity without having to pay duty on those goods.

Temporary entry is also available for other business travellers such as traders and investors, intra-company transferees and professionals.

If you expect to use any of the temporary entry provisions, you should check with the relevant immigration or customs authorities for information on any documentation requirements.

Duty Drawback

Duty drawback is the refund of customs duties levied on materials and components imported from other countries when they are incorporated into goods that are subsequently exported.

For Canada-United States trade, the FTA prescribed that all duty drawback programs were to be eliminated by January 1, 1994. NAFTA extends this deadline by two years. These programs can now be used until January 1, 1996. For trade with Mexico, existing drawback programs can be used until January 1, 2001.

After these dates, each country will still be able to adopt a partial duty-refund procedure for those goods that do not benefit from the preferential NAFTA tariff. This will avoid the payment of duties in two countries. The amount of duties waived or refunded under such programs cannot exceed the duties charged for the imported inputs or the duties charged on the finished good, whichever is less.

Safeguard Mechanism

As under the FTA, NAFTA establishes rules and procedures under which a country may take special "safeguard" actions to provide temporary relief to industries adversely affected by surges in volumes of imports.

If increased imports injure or threaten to seriously injure Canadian industry, Canada can suspend further tariff concessions or even "snap-back" the tariff to the pre-NAFTA rates of duty.

To maintain liberalized trade and avoid abuse, any country choosing to take a safeguard action must pay compensation, usually in the form of reduced duties for other goods being imported. The cost of taking safeguard actions can be considerable, and this remedy must be pursued with caution.

Dispute Settlement

NAFTA strengthens the dispute settlement mechanism negotiated under the FTA. There are three steps in the NAFTA provisions:

- **A consultative process.** When a country believes that its NAFTA access rights have been impaired, it can ask for consultations with the allegedly offending country. The other NAFTA country can also participate if it wishes.
- **An arbitration process.** If agreement is not reached through consultations, a meeting of the NAFTA Trade Commission may be called to discuss how the disagreement may be settled amicably. The commission is composed of cabinet level representatives designated by each country.
- **A "panel process."** If agreement cannot be reached through arbitration by the NAFTA Trade Commission, a NAFTA panel can be convened. The panel process would determine whether any trade action taken by a NAFTA country is consistent with the NAFTA provisions. Dispute resolution must occur within strict time limits and countries must comply with panel recommendations or offer acceptable compensation.

Procurement

Under NAFTA there are greater opportunities for Canadian firms to sell to the Mexican and U.S. governments. Whereas the FTA procurement disciplines applied only to goods purchased by some government departments, NAFTA expands the scope of obligations to include services and construction, lowers the thresholds for competitive bidding, expands the coverage to include more U.S. departments and agencies, and includes Mexican government purchases.

While most government departments and agencies may not be large-scale purchasers of electronic components, there may be some opportunities in the newly opened U.S. departments of Energy and Transport, in the Army Corps of Engineers, and through the removal of the "Buy America" provisions of the *Rural Electrification Act*.

In Mexico, the giant state-owned utilities — telecommunications (TELECOM), oil and gas (PEMEX) and power (CFE) — are also now subject to international tendering disciplines. Access will initially be subject to certain restrictions, which will be phased out over 10 years.

Standards

NAFTA includes provisions to help prevent standards from becoming trade barriers. NAFTA promotes the use of compatible standards, technical regulations and conformity-assessment procedures. In time, this provision will reduce the burden of compliance with different standards for different countries.

To reduce exporters' costs, NAFTA encourages mutual acceptance of test results and certification procedures. Approved facilities will eventually be able to certify that a product meets the standards of all three countries. The Canadian Standards Association is now able to certify that certain products meet the more than 360 U.S. health and safety standards. Underwriters' Laboratories of Illinois has been granted approval to certify that products comply with Canadian standards.

NAFTA requires that the three countries seek to ensure that provincial, state and local governments, as well as non-government standard-setting bodies, comply with the provisions described. This clause was negotiated to help Canadian manufacturers who presently face a myriad of U.S. state regulations.

Notwithstanding these improvements, Canadian firms exporting to Mexico or the United States must still ensure that products meet the safety regulations, labelling requirements and other technical standards of the country into which they are being exported.

Intellectual Property Rights

Canadian producers rely on patent and trademark protection to safeguard innovative products, special manufacturing processes and internationally known names. NAFTA provides extensive protection for patents, trademarks and trade secrets. It is the first trade agreement to offer protection for trade secrets, which can include formulas, customer lists and production processes.

The Agreement also contains extensive provisions on intellectual property enforcement, including civil and administrative procedures, provisional remedies, criminal penalties and border enforcement mechanisms.

Further information may be obtained on intellectual property matters by calling the Intellectual Property Directorate, Industry Canada at (819) 997-1936.

Other NAFTA Provisions

The Agreement contains provisions on a variety of other issues including investment, the environment, competition policy, cultural industries and cross-border trade.

To obtain additional information on these and other provisions of NAFTA, consult the publications listed at the end of this booklet.

The Canadian Industry in a North American Context

Canadian Market

The Canadian electronic component industry is a dynamic export-oriented sector composed of approximately 220 companies employing some 12,000 people. Canadian production stands at about $1.2 billion, of which approximately 80 percent is exported.

Canada currently imports about $5.5 billion worth of electronic components, 85 percent of which comes from the United States. Other important suppliers include Japan, Korea, Taiwan and Hong Kong.

Canada-United States Trade

The United States is Canada's largest trading partner for electronic components. This trade is concentrated in six product areas — printed circuits, semiconductors, capacitors, resistors, switches and connectors. Printed circuits and semiconductors account for the bulk of this trade.

Intercompany trade is very significant in the electronic component sector. A number of large multinational companies, with facilities in both Canada and the United States, import electronic components into Canada for further processing into higher value-added electronic components or finished articles. Smaller Canadian companies operate in the open market, exporting custom designed components to clients in the telecommunications, computer and automotive industries.

Canada-Mexico Trade

Trade in electronic components between Canada and Mexico is quite small. In 1992, Canadian imports of electronic components from Mexico totalled $44 million. These were mainly low-end products such as fuses, switches and lamp holders. Canadian exports to Mexico of electronic components were worth less than $1 million.

United States-Mexico Trade

During the 1980s, U.S.-Mexican trade in electronic components increased significantly as a result of the development of telecommunication, computer, and consumer electronic assembly operations in the Mexican *Maquiladora* free trade zones. By 1992, Mexican electronic component exports to the United States totalled $2 billion, while U.S. exports to Mexico were valued at $2.1 billion.

Mexican manufacturers of electronic components focus primarily on low-end semiconductor products and printed circuit boards. Expansion by Mexican manufacturers to other electronic components has been limited by a shortage of skilled workers and by a high turnover in the work force.

U.S. manufacturers supply the majority of high-end electronic components to the Mexican market.

Competitive Implications

The direct impact of increased Mexican competition on the Canadian domestic electronic component market is expected to be minimal. Despite Mexico's abundance of labour at relatively low wages, production is hindered by shortages of skilled labour and a concentration on less complex goods. This may change over time in some product areas as foreign investment in Mexico increases and the Mexican labour force becomes more skilled.

New Mexican Market Opportunities

For many years the Mexican market was highly regulated and largely closed to outside competition. Recent trade reforms and other economic policies have resulted in a more open Mexican economy. NAFTA eliminates most of the remaining impediments.

The Mexican markets for telecommunications, computers and consumer electronic products are growing rapidly. Private and foreign investors are expected to invest over $30 billion in Mexico to install new telecommunications and computer systems. This will increase Mexican demand for printed circuits, cathode ray tubes, transformers, connectors, power supplies and capacitors. Canadian suppliers of electronic components are well positioned to supply this demand.

You may obtain information on planned trade fairs or missions and on the Mexican market by contacting InfoEx or the Industry Canada contacts listed at the end of this publication.

TAKING ADVANTAGE OF NAFTA OPPORTUNITIES

Individual companies need to look at the facts to clearly determine how North American trade liberalization will affect their business. Prudent company directors will formulate a business plan to ensure that the business continues to grow while the opportunities provided by NAFTA are taken advantage of.

In assessing the impacts of the Agreement for your business, you should ask yourself the following questions:

- What effect will NAFTA tariff reductions have on my business?
- How might the changes to the rules of origin affect my products?
- Do the extended duty drawback provisions, and the improved standards, safeguards and investment provisions affect my business?
- How will NAFTA affect my customers, suppliers, and competitors?

You will want to assess how to adapt your business to the new environment under NAFTA. Some questions to be considered include:

- Which U.S. and Mexican markets have the best growth potential for my products?
- What are the best transportation, distribution and servicing arrangements for the new markets?
- Which of my products will face tougher competition domestically?
- Do I need to change my product line to take advantage of the NAFTA opportunities?
- Can new technologies or production processes reduce my costs?
- Can I take better advantage of NAFTA tariff preferences by using more North American inputs?
- What effect will expanding my market have on my cash flow, profit and loss account, and balance sheet?
- Are my human resource needs going to change?

Answering these questions will provide a good start on the type of information that you need to develop and implement a strategic plan of action in response to NAFTA's competitive environment. A full strategic plan is necessary for companies to compete successfully in today's open market system. If you need assistance in developing a strategic plan call your regional Industry Canada office or the sector contact listed at the end of this publication.

CONTACTS

For further information concerning the subject matter contained in this publication contact Industry Canada at:

Telecommunications and Microelectronics Directorate
Tel.: (613) 954-3312
Fax: (613) 952-8419, or

NAFTA Information Desk
International Business Branch
Tel.: (613) 952-5010
Fax: (613) 952-0540

For information on NAFTA-related customs matters, advanced rulings on classification, and tariff rates contact:

Revenue Canada — Customs, NAFTA Infoline:
(613) 941-0965 Fax: (613) 941-8138

Mexico Customs Service, NAFTA Hotline:
(011-525) 211-3545 Fax: (011-525) 224-3000

U.S. Customs Service, NAFTA Hotline:
(202) 927-0066 Fax: (202) 927-0097

For information on NAFTA-related export development programs and activities contact:

InfoEx
Foreign Affairs and International Trade Canada
Tel.: 1-800-267-8376 (Ottawa area: (613) 944-4000 or 993-6435)
Fax: (613) 996-9709

To obtain product-specific reports on North American trade data contact:

Market Intelligence and Technology Opportunities Service
Industry Canada
Tel.: (613) 954-4970 Fax: (613) 954-2340

To obtain information on how to access government procurement opportunities in Canada, the United States and Mexico contact:

Open Bidding Info Line
Public Works, Government Services Canada
Tel.: (819) 956-3440

Open Bidding Registration
Tel.: 1-800-361-4637 (Ottawa area: (613) 737-3374)

OTHER PUBLICATIONS

The other sector-specific NAFTA publications in this series include:

- Apparel
- Chemicals
- Construction Materials
- Electrical Equipment
- Environmental Equipment and Services
- Fish and Fish Products
- Furniture
- Health Care Products
- Industrial Equipment
- Major Appliances
- Paper Products
- Plastics
- Primary Metals
- Professional and Business Services
- Resource Equipment
- Sporting and Recreational Equipment
- Telecommunications Equipment
- Textiles
- Urban Transit and Rail
- Wood and Wood Products

To order any of the above or additional copies of this publication contact:

NAFTA Information Desk
Industry Canada
Tel.: (613) 952-5010
Fax: (613) 952-0540

The following publications provide additional information on the Agreement and guidance on exporting within the NAFTA trade area:

- *NAFTA: What's it all about?*
- *North American Free Trade Agreement*
- *Documents and Regulations for Exporting to Mexico*
- *Guide to Rules of Origin and Customs Procedures for Canadian Exporters to the U.S. Market*
- *Mexico: A Guide for Canadian Exporters*
- *Government Procurement in Mexico*
- *Mexican Market Study on Electronic Components*

These are available from:

InfoEx
Foreign Affairs and International Trade Canada
Tel.: 1-800-267-8376 (Ottawa area: (613) 993-6435)
Fax: (613) 996-9709

For additional information on importing products to Canada and on other customs issues, the following publications are available:

- *Importing Goods Into Canada*
- *Trilateral Customs Guide to NAFTA*
- *NAFTA Rules of Origin — A Step by Step Guide*

These may be obtained from the regional offices of Revenue Canada — Customs or by contacting:

Revenue Canada — Customs
Tel.: (613) 941-0965 Fax: (613) 941-8138

The following publication provides reports on 36 manufacturing sectors and describes the new benefits and opportunities in Mexico and Canada for U.S. industries:

- *NAFTA Opportunities for U.S. Industries* (PB#94-100849)

The above publication or the individual sector reports may be ordered through:

U.S. Department of Commerce
Tel.: (703) 487-4650

ANNEX A
Canada-Mexico NAFTA Tariff Phase-Outs

This annex lists the tariff phase-out stages for most electronic components by tariff classification number. It contains a brief description of the products in each tariff subheading as well as the specific phase-out category and base rate of duty for each tariff item.

The information contained in this annex is to be used as a guide only. In the event of any discrepancy in information between this schedule and the official country-specific tariff schedule, the latter will prevail.

Tariff classifications are identical for all countries up to the "subheading level," as indicated by the first six digits of the classification of a good. At the eight digit or "tariff item" level, however, classifications often differ between Canada, Mexico and the United States. Consequently, it may be necessary to refer to each country's tariff schedule to find the product descriptions at the more detailed tariff item level.

The following provides a key to the various phase-out categories and other abbreviations used:

A – tariff elimination occurred on implementation of the Agreement on January 1, 1994;

B – tariff to be eliminated in five equal annual stages beginning January 1, 1994 and ending January 1, 1998;

C – tariff to be eliminated in 10 equal annual stages beginning January 1, 1994 and ending January 1, 2003;

D – the tariff is already zero or free;

( ) – the bracketed tariff rate is to be applied when calculating the duty on goods that are "jointly produced" by Mexico and the United States, and are imported into Canada;

nes – not elsewhere specified in the tariff schedule.

Electronic Components
Canada-Mexico Tariff Phase-Out Schedule

SUB-HEADING	DESCRIPTION	CANADA ITEM	CANADA RATE (%)	CANADA PHASING	MEXICO ITEM	MEXICO RATE (%)	MEXICO PHASING
8504.50	Inductors, electric	8504.50.10	Free	D	8504.50.01	15	C
		8504.50.90	5.5	B	8504.50.02	15	C
					8504.50.03	10	A
					8504.50.99	10	A
8504.90	Parts of electrical transformers, static converters and inductors	8504.90.11	10 (15)	B	8504.90.01	10	A
		8504.90.12	Free	D	8504.90.02	10	C
		8504.90.13	6	B	8504.90.03	10	A
		8504.90.14	6	A	8504.90.04	10	A
		8504.90.15	11.5	B	8504.90.05	10	A
		8504.90.16	6	B	8504.90.06	15	C
		8504.90.17	6	B	8504.90.07	10	C
		8504.90.80	6	A	8504.90.08	10	C
		8504.90.91	10 (15)	B	8504.90.99	10	C
		8504.90.92	Free	D			
		8504.90.93	6	B			
		8504.90.94	6	B			
		8504.90.95	11.5	B			
		8504.90.96	6	B			
8532.21	Electrical capacitors, fixed, tantalum, nes	8532.21.00	6.5	A	8532.21.01	10	A
					8532.21.99	10	A
8532.22	Electrical capacitors, fixed, aluminium electrolytic, nes	8532.22.00	6.5	A	8532.22.01	10	A
					8532.22.99	10	C
8532.23	Electrical capacitors, fixed, ceramic dielectric, single layer, nes	8532.23.00	6.5	A	8532.23.01	10	A
					8532.23.02	15	A
					8532.23.03	10	A
					8532.23.99	15	A
8532.24	Electrical capacitors, fixed, ceramic dielectric, multilayer, nes	8532.24.00	6.5	A	8532.24.01	10	A
					8532.24.02	15	A
					8532.24.03	10	A
					8532.24.99	15	A
8532.25	Electrical capacitors, fixed, dielectric of paper or plastics, nes	8532.25.00	6.5	B	8532.25.01	10	A
					8532.25.02	15	C
					8532.25.99	15	C
8532.29	Electrical capacitors, fixed, nes	8532.29.00	6.5	B	8532.29.01	15	B
					8532.29.02	15	B
					8532.29.03	10	A
					8532.29.04	10	B
					8532.29.05	10	A
					8532.29.99	15	B
8532.30	Electrical capacitors, variable or adjustable (pre-set)	8532.30.00	6.5	A	8532.30.01	10	A
					8532.30.02	10	A
					8532.30.03	15	A
					8532.30.04	15	A
					8532.30.05	10	A
					8532.30.99	15	A
8532.90	Parts of electrical capacitors	8532.90.00	6.5	A	8532.90.01	10	A

SUB-HEADING	DESCRIPTION	CANADA ITEM	CANADA RATE (%)	CANADA PHASING	MEXICO ITEM	MEXICO RATE (%)	MEXICO PHASING
8533.40	Variable resistors, including rheostats and potentiometers, nes	8533.40.10	6.5	A	8533.40.01	10	A
		8533.40.90	6.5	A	8533.40.02	15	A
					8533.40.03	10	A
					8533.40.04	15	C
					8533.40.05	15	B
					8533.40.06	15	B
					8533.40.07	15	B
					8533.40.99	15	B
8533.90	Parts of electrical resistors, rheostats and potentiometers	8533.90.11	6.5	A	8533.90.01	10	A
		8533.90.19	6.5	A	8533.90.02	10	A
		8533.90.20	6.5	A	8533.90.99	10	A
8534.00	Printed circuits	8534.00.00	6.5	B	8534.00.01	15	B
					8534.00.99	10	B
8540.41	Magnetron tubes	8540.41.00	9.2	A	8540.41.01	15	A
8540.42	Klystron tubes	8540.42.00	9.2	A	8540.42.01	15	A
8540.49	Microwave tubes, nes	8540.49.00	9.2	A	8540.49.99	15	A
8540.81	Receiver or amplifier valves and tubes	8540.81.00	9.2	A	8540.81.01	10	A
					8540.81.02	10	A
					8540.81.99	15	A
8540.89	Valves and tubes, nes	8540.89.00	9.2	A	8540.89.01	10	A
					8540.89.02	10	A
					8540.89.03	10	A
					8540.89.99	15	A
8540.91	Parts of cathode-ray tubes	8540.91.10	Free	D	8540.91.01	10	A
		8540.91.90	Free	D	8540.91.02	10	A
					8540.91.03	5	A
					8540.91.04	10	A
					8540.91.05	15	A
					8540.91.06	5	A
					8540.91.07	10	A
					8540.91.99	10	A
8540.99	Parts of valve and tubes, nes	8540.99.10	Free	D	8540.99.01	10	A
		8540.99.90	Free	D	8540.99.02	10	A
					8540.99.03	10	A
					8540.99.04	10	A
					8540.99.05	10	A
					8540.99.99	10	A
8541.10	Diodes, other than photosensitive or light emitting diodes	8541.10.10	Free	A	8541.10.01	10	A
		8541.10.90	Free	D	8541.10.99	15	A
8541.21	Transistors, other than photosensitive, with a dissipation rate of less than 1 W	8541.21.00	Free	D	8541.21.01	10	A
8541.29	Transistors, other than photosensitive transistors, nes	8541.29.00	Free	D	8541.29.99	10	A
8541.30	Thyristors, diacs and triacs, other than photosensitive devices	8541.30.11	Free	A	8541.30.01	10	A
		8541.30.19	Free	D	8541.30.99	15	A
		8541.30.20	Free	D			
8541.40	Photosensitive semiconductor devices, photovoltaic cells and light emitting diodes	8541.40.10	Free	D	8541.40.01	10	A
		8541.40.90	Free	D	8541.40.02	15	A
					8541.40.03	10	A
					8541.40.04	10	A
					8541.40.99	15	A

SUB-HEADING	DESCRIPTION	CANADA ITEM	CANADA RATE (%)	CANADA PHASING	MEXICO ITEM	MEXICO RATE (%)	MEXICO PHASING
8541.50	Semiconductor devices, nes	8541.50.00	Free	D	8541.50.01	10	A
					8541.50.02	5	A
					8541.50.99	15	A
8541.60	Mounted piezo-electric crystals	8541.60.00	Free	A	8541.60.01	15	A
8541.90	Parts of mounted piezo-electric crystals and semiconductor devices	8541.90.00	Free	D	8541.90.01	10	A
8542.11	Monolithic integrated circuits, digital	8542.11.10	Free	D	8542.11.01	10	A
		8542.11.90	Free	D	8542.11.02	10	A
					8542.11.99	10	A
8542.19	Monolithic integrated circuits, nes	8542.19.00	Free	D	8542.19.01	10	A
					8542.19.99	10	A
8542.20	Hybrid integrated circuits	8542.20.00	Free	A	8542.20.01	10	A
					8542.20.02	15	A
					8542.20.99	10	A
8542.80	Electronic integrated circuits and microassemblies, nes	8542.80.00	Free	D	8542.80.01	10	A
					8542.80.99	10	A

Note: You are reminded that this schedule is to be used as a guide only.

ANNEX B
Rules of Origin for Electronic Components

Chapter 85	**Electrical Machinery and Equipment and Parts Thereof; Sound Recorders and Reproducers, Television Image and Sound Recorders and Reproducers, and Parts and Accessories of Such Articles**
8504.50	A change to subheading 8504.50 from any other heading; or A change to subheading 8504.50 from subheading 8504.90, whether or not there is also a change from any other heading, provided there is a regional value content of not less than: (a) 60 percent where the transaction-value method is used, or (b) 50 percent where the net-cost method is used.
8504.90	
8504.90.bb	A change to Canadian tariff item 8504.90.80 or Mexican tariff item 8504.90.08 from any other tariff item.
8504.90	A change to subheading 8504.90 from any other heading.
8532.21-8532.30	A change to subheading 8532.21 through 8532.30 from any other subheading, including another subheading within that group.
8532.90	A change to subheading 8532.90 from any other heading.
8533.40	A change to subheading 8533.40 from any other subheading, except from Canadian tariff item 8533.90.11, U.S. tariff item 8533.90.00A or Mexican tariff item 8533.90.02.
8533.90	A change to subheading 8533.90 from any other heading.
85.34	A change to heading 85.34 from any other heading.
8540.41-8540.49	A change to subheading 8540.41 through 8540.49 from any subheading outside of that group, except from Canadian tariff item 8540.99.10, U.S. tariff item 8540.99.00A or Mexican tariff item 8540.99.05.
8540.81-8540.89	A change to subheading 8540.81 through 8540.89 from any other subheading, including another subheading within that group.
8540.91	
8540.91.aa	A change to Canadian tariff item 8540.91.10, U.S. tariff item 8540.91.40A or Mexican tariff item 8540.91.03 from any other tariff item.
8540.91	A change to subheading 8540.91 from any other heading.
8540.99	
8540.99.aa	A change to Canadian tariff item 8540.99.10, U.S. tariff item 8540.99.00A or Mexican tariff item 8540.99.05 from any other tariff item.
8540.99	A change to subheading 8540.99 from any other heading.

85.41-85.42	**Note:** *Notwithstanding Article 411 (Transshipment), a good provided for in subheading 8541.10 through 8541.60 or 8542.11 through 8542.80 qualifying under the rule below as an originating good may undergo further production outside the territory of the Parties and, when imported into the territory of a Party, will originate in the territory of a Party, provided that such further production did not result in a change to a subheading outside of that group.* A change to subheading 8541.10 through 8542.90 from any other subheading, including another subheading within that group.

ANNEX C
Calculating Regional Value Content

The rules of origin specify that certain goods must meet a regional value content requirement.

NAFTA provides two alternative methods that exporters can use to calculate the regional value content of their goods:

- the transaction-value method; and
- the net-cost method.

In most cases, exporters can choose either method.

If exporters select the transaction-value method and they are advised by Customs that the transaction value of the good (or the value of any material used to produce the good) is unacceptable or needs to be adjusted, they can choose to use the net-cost method.

However, if they select the net-cost method initially and the results are unfavourable, they cannot switch to the transaction-value method.

Transaction-Value Method

Under the transaction-value method, exporters have to subtract the value of any non-originating material (i.e. non-North American) used to produce the good from the actual price paid or payable for the good. In most cases, the value of non-originating material is the total amount it costs producers to purchase the material and get it to the production site.

Then, exporters have to divide the difference by the price, and convert the result to a percentage to get the regional value content or the RVC.

The formula is as follows:

$$\frac{\text{Transaction value} - \text{Value of non-originating materials}}{\text{Transaction value}} \times 100 = \text{RVC}$$

In most cases, if exporters use the transaction-value method, the specific rule of origin will require that the RVC for an originating good must be at least 60 percent.

Exporters cannot use the transaction-value method in the following circumstances:

- the good has no transaction value (e.g. barter);
- the transaction value of the good is not acceptable under the Customs Valuation Code (refer to brochure entitled *Value For Duty*, available at any Customs regional office); and
- the majority of the producer's sales are to related parties.

Exporters who are not sure whether they can use the transaction-value method should call a Revenue Canada — Customs regional office.

Net-Cost Method

Under the net-cost method, exporters have to subtract the value of non-originating materials used to produce the finished good from the net cost of the good. In most cases, the value of a non-originating material is the total amount it costs producers to purchase the material and get it to the production site.

Then, exporters have to divide the difference by the net cost, and convert the result to a percentage to get the RVC.

The net-cost formula is as follows:

$$\frac{\text{Net cost} - \text{Value of non-originating materials}}{\text{Net cost}} \times 100 = \text{RVC}$$

In most cases, if exporters use the net-cost method, the specific rule of origin will require that the RVC for an originating good must be at least 50 percent.

To determine the net cost of a good, begin with all the costs of producing the good, and then subtract any costs that are specifically excluded. Specifically excluded costs are costs for:

- sales promotion and marketing;
- after-sales service;
- royalties;
- shipping and packing; and
- non-allowable interest.

DATE DUE - DATE DE RETOUR

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