## INTERNATIONAL STANDARD

ISO/IEC 8859-11

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## Information technology — 8-bit single-byte coded graphic character sets —

Part 11: Latin/Thai alphabet

Technologies de l'information — Jeux de caractères graphiques codés sur un seul octet

Partie 11: Alphabet latin/thaï ai

ISO/IEC 8859-11:2001 https://standards.iteh.ai/catalog/standards/sist/56bc4590-01e7-412f-8438-7b0ad07f1350/iso-iec-8859-11-2001



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#### **Foreword**

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO/IEC 8859 may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent EVIEW rights.

ISO/IEC 8859-11 was prepared by Joint Technical Committee all ISO/IEC JTC 1, Information technology, Subcommittee SC 2, Coded character sets.

ISO/IEC 8859-11:2001

ISO/IEC 8859 consists of the following parts, under the general title 590-01e7-412f-8438-Information technology — 8-bit single-byte coded graphic character 2001 sets:

- Part 1: Latin alphabet No. 1
- Part 2: Latin alphabet No. 2
- Part 3: Latin alphabet No. 3
- Part 4: Latin alphabet No. 4
- Part 5: Latin/Cyrillic alphabet
- Part 6: Latin/Arabic alphabet
- Part 7: Latin/Greek alphabet
- Part 8: Latin/Hebrew alphabet
- Part 9: Latin alphabet No. 5
- Part 10: Latin alphabet No. 6
- Part 11: Latin/Thai alphabet
- Part 13: Latin alphabet No. 7
- Part 14: Latin alphabet No. 8 (Celtic)
- Part 15: Latin alphabet No. 9
- Part 16: Latin alphabet No. 10

Annex A of this part of ISO/IEC 8859 is for information only.

### Introduction

ISO/IEC 8859 consists of several parts. Each part specifies a set of up to 191 graphic characters and the coded representation of these characters by means of a single 8-bit byte. Each set is intended for use for a particular group of languages.

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## Information technology – 8-bit single-byte coded graphic character sets -

### Part 11: Latin/Thai alphabet

#### 1 Scope

This part of ISO/IEC 8859 specifies a set of 183 coded graphic characters identified as Latin/Thai alphabet.

This set of coded graphic characters is intended for use in data and text processing applications and also for information interchange.

The set contains graphic characters used for general purpose applications in typical office environments in at least the following languages:

Thai, English and Latin.

Some of the characters in this set are combining characters (see clause 6).

This set of coded graphic characters may be regarded as a version of an 8-bit code according to ISO/IEC 2022 or ISO/IEC 4873 at level 1.

This part of ISO/IEC 8859 may not be used in conjunction with any other parts of ISO/IEC 8859. If coded characters from more than one part are to be used together, by means tarofard code ai/extension dards/siASTeceiving) device shall be capable of receiving and techniques, the equivalent coded characteri3setso-iec-8/interpreting any coded representations of characters from ISO/IEC 10367 or their corresponding G1 sets from 'ISO International Register of Coded Character Sets to be used with escape sequences', should be used instead within a version of ISO/IEC 4873 at level 2 or level 3.

The coded characters in this set may be used in conjunction with coded control functions selected from ISO/IEC 6429. However, control functions are not used to create composite graphic symbols from two or more graphic characters (see clause 6).

NOTE - ISO/IEC 8859 is not intended for use with Telematic services defined by ITU-T. If information coded according to ISO/IEC 8859 is to be transferred to such services, it will have to conform to the requirements of those services at the access-point.

#### 2 Conformance

#### 2.1 Conformance of information interchange

A coded-character-data-element (CC-data-element) within coded information for interchange is in conformance with this part of ISO/IEC 8859 if all the coded representations of graphic characters within that CC-data-element conform to the requirements of clause 6.

#### 2.2 Conformance of devices

A device is in conformance with this part of ISO/IEC 8859 if it conforms to the requirements of 2.2.1, and either or both of 2.2.2 and 2.2.3. A claim of conformance shall identify the document which contains the description specified in 2.2.1.

#### 2.2.1 Device description

A device that conforms to this part of ISO/IEC 8859 shall be the subject of a description that identifies the means by which the user may supply characters to the device, or may recognize them when they are made available to him, as specified respectively in 2.2.2 and 2.2.3.

#### 2.2.2 Originating devices

An originating device shall allow its user to supply any sequence of characters from those specified in clause 6, and shall be capable of transmitting their coded representations within a CC-data-element.

#### 2.2.3 Receiving devices

that are within a CC-data-element, and that conform to clause 6, and shall make the corresponding characters available to its user in such a way that the user can identify them from among those specified there, and can distinguish them from each other.

#### 3 Normative references

following normative documents provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 8859. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO/IEC 8859 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO/IEC 2022:1994, Information technology – Character code structure and extension techniques

ISO/IEC 4873:1991, Information technology – ISO 8-bit code for information interchange – Structure and rules for implementation

ISO/IEC 8824-1:1998, Information technology – Abstract Syntax Notation One (ASN.1): Specification of basic notation

#### 4 Terms and definitions

For the purposes of this part of ISO/IEC 8859, the following terms and definitions apply.

- **4.1 bit combination:** An ordered set of bits used for the representation of characters.
- 4.2 byte: A bit string that is operated upon as a unit.
- **4.3 character:** A member of a set of elements used for the organization, control, or representation of data.
- **4.4 code table:** A table showing the characters allocated to each bit combination in a code.
- 4.5 coded character set; code: A set of A unambiguous rules that establishes a character set and the one-to-one relationship between the characters of the set and their bit combinations.
- **4.6 coded-character-data-element (CC-data-EC 885) element):** An element of interchanged information tandard that is specified to consist of a sequence of coded O/iso-ie representations of characters, in accordance with one or more identified standards for coded character sets.
- **4.7 graphic character:** A character, other than a control function, that has a visual representation normally handwritten, printed or displayed, and that has a coded representation consisting of one or more bit combinations.

**NOTE** – In ISO/IEC 8859 a single bit combination is used to represent each character.

- **4.8 graphic symbol:** A visual representation of a graphic character or of a control function.
- **4.9 position:** That part of a code table identified by its column and row coordinates.

#### 5 Notation, code table and names

#### 5.1 Notation

The bits of the bit combinations of the 8-bit code are identified by b<sub>8</sub>, b<sub>7</sub>, b<sub>6</sub>, b<sub>5</sub>, b<sub>4</sub>, b<sub>3</sub>, b<sub>2</sub>, and b<sub>1</sub>, where b<sub>8</sub> is the highest-order, or most-significant bit and b<sub>1</sub> is the lowest-order, or least-significant bit.

The bit combinations may be interpreted to represent numbers in binary notation by attributing the following weights to the individual bits:

Bit	b <sub>8</sub>	b <sub>7</sub>	b <sub>6</sub>	b <sub>5</sub>	b <sub>4</sub>	$b_3$	b <sub>2</sub>	b <sub>1</sub>
Weight	128	64	32	16	8	4	2	1

Using these weights, the bit combinations are identified by notations of the form xx/yy, where xx and yy are numbers in the range 00 to 15. The correspondence between the notations of the form xx/yy and the bit combinations consisting of the bits  $b_8$  to  $b_1$  is as follows:

- $-\,$  xx is the number represented by b<sub>8</sub>,b<sub>7</sub>,b<sub>6</sub> and b<sub>5</sub> where these bits are given the weights 8, 4, 2, and 1 respectively.
- yy is the number represented by  $b_4$ ,  $b_3$ ,  $b_2$  and  $b_1$  where these bits are given the weights 8, 4, 2, and 1 respectively.

The bit combinations are also identified by notations of the form hk, where h and k are numbers in the range 0 to F in hexadecimal notation. The number h is the same as the number xx described above, and the number k the same as the number yy described above.

### 5.2 Layout of the code table

An 8-bit code table consists of 256 positions arranged in 16 columns and 16 rows. The columns and the rows are numbered 00 to 15. In hexadecimal notation the columns and the rows are numbered 0 to F.

The code table positions are identified by notations of the form xx/yy, where xx is the column number and yy is the row number. The column and row numbers are shown at the top and left edges of the table respectively. The code table positions are also identified by notations of the form hk, where h is the column number and k is the row number in hexadecimal notation. The column and row numbers are shown at the bottom and right edges of the table respectively.

The positions of the code table are in one-to-one correspondence with the bit combinations of the code. The notation of a code table position, of the form xx/yy, or of the form hk, is the same as that of the corresponding bit combination.

#### 5.3 Names and meanings

This part of ISO/IEC 8859 assigns a unique name and a unique identifier to each graphic character. These names and identifiers have been taken from ISO/IEC 10646-1 (E). This part of ISO/IEC 8859

also specifies an acronym for each of the characters SPACE, NO-BREAK SPACE and SOFT HYPHEN. For acronyms only Latin capital letters A to Z are used. It is intended that the acronyms be retained in all translations of the text.

Except for SPACE (SP), NO-BREAK SPACE (NBSP) and SOFT HYPHEN (SHY), this part of ISO/IEC 8859 does not define and does not restrict the meanings of graphic characters.

This part of ISO/IEC 8859 specifies a graphic symbol for each graphic character. This symbol is shown in the corresponding position of the code table. However, this part, or any other part, of ISO/IEC 8859 does not specify a particular style or font design for imaging graphic characters. Annex B of ISO/IEC 10367 gives further information on this subject.

#### 5.3.1 SPACE (SP)

A graphic character the visual representation of which consists of the absence of a graphic symbol.

#### 5.3.2 NO-BREAK SPACE (NBSP)

A graphic character the visual representation of which consists of the absence of a graphic symbol, for use when a line break is to be prevented in the text as RD PREVIEW presented.

#### 5.3.3 SOFT HYPHEN (SHY)

A graphic character that is imaged by a graphic symbol identical with, or similar to, that representing HYPHEN, for use when a line break has been established within a word.

#### 6 Specification of the coded character set

This part of ISO/IEC 8859 specifies 183 characters allocated to the bit combinations of the code table (table 2).

Some of these characters are combining characters. They are identified in table 1 as such.

NOTE - Combining characters are described in ISO/IEC 2022:1994 subclause 6.3.3.

Control functions, such as BACKSPACE CARRIAGE RETURN, shall not be used to create composite graphic symbols, which are made up from the graphic representations of two or more characters.

#### 6.1 Characters of the set and their coded representation

See table 1.

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