

# Inuktitut Keyboard Specification

## v. 1.0

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## Section II - Syllabic Keyboards:

(the following is extracted from the Inuktitut Locale Development Specification currently in progress)

This section covers the specification for a Unicode Syllabic keyboard layout for the Nunavut region.

The general layout of syllabic keyboards for Inuktitut has, by and large, been standardized since the first introduction of the Syllabic IBM Selectric typewriter. Variations have emerged over the past 15 years, however the essential layout remains the same.

At present, the only layout to be supported by training courses and materials is the “Namajut” keyboard on Macintosh computers. Translators and teachers have learned this layout in their education and font developers have emulated it (often with some changes) when creating 7 or 8 bit fonts mapped to the US English layout. The widespread use of the Namajut keyboard (and the later “Nunacom” variation) allows for a standard key placement to be recognized.

While the base layout is easily determined there do exist some options in a Unicode-only environment for the input of the ‘dotted’ syllabics. Traditionally, these characters have been input using a somewhat complicated deadkey method similar to that used for accented Latin characters.

Some work has been done in assessing user needs using the Windows “Inuktitut Nunacom Unicode” keyboard driver provided to the Government of Nunavut by Microsoft for Windows NT and 2000. This keyboard uses the ‘RIGHT ALT’ in combination with either the base row or shifted key to create the dotted variant. It is expected that a Macintosh keyboard replicating this layout would use both “OPTION” keys to create a similar result.

User feedback has been that some awkwardness exists in having only the RIGHT ALT key to input the dotted forms. Assuming that it is not viable to use the LEFT ALT key for similar purposes, it has been recommended that the deadkey combinations be “re-introduced” into this layout as an alternative input for these characters. The keys chosen for these deadkey additions are those presently represented in the US English keyboard as u+005D and u+0060. The input method with the deadkey should be: deadkey + (syllabic) > long form syllabic.

## Syllabic Keyboard Layout - Unicode:

*The following is based upon the original Nunacom layout defined by Nortext Multimedia. This layout was later modified and encoded into a Windows NT/2000 keyboard driver by Microsoft for use by the Government of Nunavut. This version is essentially the same, however includes additional options for the 'dotted syllabic' input.*

Specification:

### Standard:

- Level 1 - Latin Script Inuktitut Text
  - CAPS LOCK OFF = Standard QWERTY US ENGLISH KEYBOARD
- Level 2 - Syllabic
  - CAPS LOCK ON = Base Syllabic Row
- Level 3 - Syllabic
  - CAPS LOCK ON + SHIFT = Shifted Row

### Revised:

*Windows/PC:*

- Level 4 -
  - CAPS LOCK ON + RIGHT ALT + key = Base Row Long Form ('dotted')
- Level 4 deadkey A:
  - CAPS LOCK ON + ` (u+005D) + key
- Level 4 deadkey B:
  - CAPS LOCK ON + ] (u+0060) + key
- Level 5 -
  - CAPS LOCK ON + SHIFT + RIGHT ALT + key = Shifted Row Long Form ('dotted')
- Level 5 deadkey A:
  - CAPS LOCK ON + SHIFT + ` (u+005D) + key
- Level 5 deadkey B:
  - CAPS LOCK ON + SHIFT + ] (u+0060) + key

*Macintosh:*

- Level 4 -
  - CAPS LOCK ON + OPTION + key = Base Row Dotted Syllabic
- Level 4 deadkey A:
  - CAPS LOCK ON + ` (u+005D) + key
- Level 4 deadkey B:
  - CAPS LOCK ON + ] (u+0060) + key
- Level 5 -
  - CAPS LOCK ON + SHIFT + OPTION + key = Shifted Row Long Form ('dotted')
- Level 5 deadkey A:
  - CAPS LOCK ON + SHIFT + ` (u+005D) + key
- Level 5 deadkey B:
  - CAPS LOCK ON + SHIFT + ] (u+0060) + key

## Inuktitut Unicode Keyboard Layout - Definitions

The following definitions are based upon a mapping over a standard US English QWERTY keyboard. Where gaps exist in the definition it is assumed that the underlying US English key would be defined. Where no key is defined, no value should be encoded. The number pad and function keys should function in their default manner.

Level 1 (CAPS OFF)	Level 2 (CAPS ON)	Level 3 (CAPS +Shift)
US English QWERTY	+ "1" > U+1595	+ 'Q' > U+148B
	+ "2" > U+1449	+ 'W' > U+1431
Both the normal and shift layouts should be as per the standard US English layout.	+ "3" > U+1550	+ 'E' > U+1546
	+ "4" > U+1483	+ 'R' > U+1595
	+ "5" > U+1466	+ 'T' > U+1671
	+ "6" > U+1585	+ 'Y' > U+1673
	+ "7" > U+14BB	+ 'U' > U+1675
Note: this is used for inputting the latin script version of the Inuktitut language.	+ "8" > U+14D0	+ 'I' > U+15A4
	+ "9" > U+14EA	+ 'O' > U+15A0
	+ "0" > U+153E	+ 'P' > U+15A6
	+ "=" > U+155D	+ '{' > U+1505
	+ "q" > U+158F	+ 'A' > U+148D
	+ "w" > U+1403	+ 'S' > U+1433
	+ "e" > U+157F	+ 'D' > U+1548
	+ "r" > U+146D	+ 'F' > U+1555
	+ "t" > U+144E	+ 'G' > U+0028
	+ "y" > U+14EF	+ 'H' > U+0029
	+ "u" > U+14A5	+ 'J' > U+152A
	+ "i" > U+14C2	+ 'K' > U+1557
	+ "o" > U+14D5	+ 'L' > U+15A2
	+ "p" > U+1528	+ 'Z' > U+1490
	+ "l" > U+14A1	+ 'X' > U+1438
	+ "a" > U+1591	+ 'C' > U+154B
	+ "s" > U+1405	+ 'B' > U+157C
	+ "d" > U+1581	+ 'N' > U+14C7
	+ "f" > U+146F	+ 'M' > U+14DA
	+ "g" > U+1450	+ '?' > U+1559
	+ "h" > U+14F1	+ 'V' > U+003F
	+ "j" > U+14A7	+ '!' > U+0031
	+ "k" > U+14C4	+ '@' > U+0032
	+ "l" > U+14D7	+ '#' > U+0033
	+ "z" > U+1593	+ '\$' > U+0034
	+ "x" > U+140A	+ '%' > U+0035
	+ "c" > U+1583	+ '^' > U+0036
	+ "v" > U+1472	+ '&' > U+0037
	+ "b" > U+1455	+ '*' > U+0038
	+ "n" > U+14F4	+ '(' > U+0039
	+ "m" > U+14AA	+ ')' > U+0030
	+ "/" > U+152D	
	+ "-" > U+002D	
	+ "\" > U+005C	
	+ ",'" > U+003B	
	+ "''" > U+0027	
	+ ",'" > U+002C	
	+ ",'" > U+002E	

## Inuktitut Unicode Keyboard Layout - Definitions

### Levels 4, 4a, 4b (CAPS)

Input Method Options for “dotted” syllabic characters \*NOTE: the deadkey should be on the **key location** of u+005D and u+0060, NOT mapped to the actual character.

LEVEL 4 CAPS + RIGHT ALT	LEVEL 4 Deadkey A: CAPS + (u+005D) + key	LEVEL 4 Deadkey B: CAPS + (u+0060) + key
+ “q” > U+1590	“ \ “ + “q” > U+1590	] + “q” > U+1590
+ “w” > U+1404	“ \ ” + “w” > U+1404	] + “w” > U+1404
+ “e” > U+1580	“ \ ” + “e” > U+1580	] + “e” > U+1580
+ “r” > U+146E	“ \ ” + “r” > U+146E	] + “r” > U+146E
+ “t” > U+144F	“ \ ” + “t” > U+144F	] + “t” > U+144F
+ “y” > U+14F0	“ \ ” + “y” > U+14F0	] + “y” > U+14F0
+ “u” > U+14A6	“ \ ” + “u” > U+14A6	] + “u” > U+14A6
+ “i” > U+14C3	“ \ ” + “i” > U+14C3	] + “i” > U+14C3
+ “o” > U+14D6	“ \ ” + “o” > U+14D6	] + “o” > U+14D6
+ “p” > U+1529	“ \ ” + “p” > U+1529	] + “p” > U+1529
+ “a” > U+1592	“ \ ” + “a” > U+1592	] + “a” > U+1592
+ “s” > U+140B	“ \ ” + “s” > U+140B	] + “s” > U+140B
+ “d” > U+1582	“ \ ” + “d” > U+1582	] + “d” > U+1582
+ “f” > U+1470	“ \ ” + “f” > U+1470	] + “f” > U+1470
+ “g” > U+1451	“ \ ” + “g” > U+1451	] + “g” > U+1451
+ “h” > U+14F2	“ \ ” + “h” > U+14F2	] + “h” > U+14F2
+ “j” > U+14A8	“ \ ” + “j” > U+14A8	] + “j” > U+14A8
+ “k” > U+14C5	“ \ ” + “k” > U+14C5	] + “k” > U+14C5
+ “l” > U+14D8	“ \ ” + “l” > U+14D8	] + “l” > U+14D8
+ “z” > U+1594	“ \ ” + “z” > U+1594	] + “z” > U+1594
+ “x” > U+1406	“ \ ” + “x” > U+1406	] + “x” > U+1406
+ “c” > U+1584	“ \ ” + “c” > U+1584	] + “c” > U+1584
+ “v” > U+1473	“ \ ” + “v” > U+1473	] + “v” > U+1473
+ “b” > U+1456	“ \ ” + “b” > U+1456	] + “b” > U+1456
+ “n” > U+14F5	“ \ ” + “n” > U+14F5	] + “n” > U+14F5
+ “m” > U+14AB	“ \ ” + “m” > U+14AB	] + “m” > U+14AB
+ “/” > U+152E	“ \ ” + “/” > U+152E	] + “/” > U+152E
+ “1” > U+0021		
+ “2” > U+0040		
+ “3” > U+0023		
+ “4” > U+0024		
+ “5” > U+0025		
+ “6” > U+005E		
+ “7” > U+0026		
+ “8” > U+002A		
+ “9” > U+005B		
+ “0” > U+005D		
+ “=” > U+003D		
+ “\” > U+002F		
+ “.” > U+00D7		
+ “.” > U+0142		

## Inuktitut Unicode Keyboard Layout - Definitions

### Levels 5, 5a, 5b (CAPS + SHIFT)

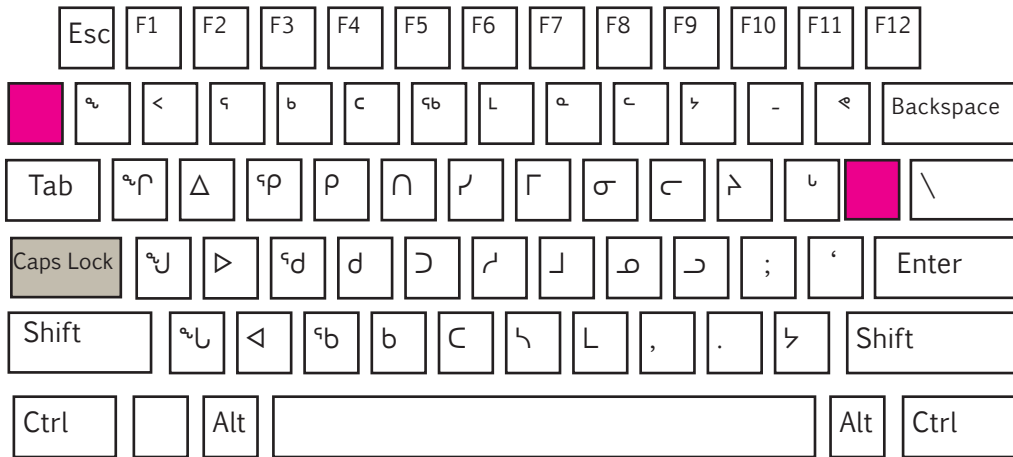
Input Method Options for “dotted” syllabic characters

\*NOTE: the deadkey should be on the **key location** of u+005D and u+0060, NOT mapped to the actual character

<b>LEVEL 5</b> CAPS + Shift + RIGHT ALT	<b>LEVEL 5 Deadkey A</b> CAPS + (u+005D) + Shift	<b>LEVEL 5 Deadkey B</b> CAPS + (u+0060) + Shift
+ 'Q' > U+148C	] + 'Q' > U+148C	] + 'Q' > U+148C
+ 'W' > U+1432	] + 'W' > U+1432	] + 'W' > U+1432
+ 'E' > U+1547	] + 'E' > U+1547	] + 'E' > U+1547
+ 'T' > U+1672	] + 'T' > U+1672	] + 'T' > U+1672
+ 'Y' > U+1674	] + 'Y' > U+1674	] + 'Y' > U+1674
+ 'U' > U+1676	] + 'U' > U+1676	] + 'U' > U+1676
+ 'I' > U+15A5	] + 'I' > U+15A5	] + 'I' > U+15A5
+ 'O' > U+15A1	] + 'O' > U+15A1	] + 'O' > U+15A1
+ '{' > U+1506	] + '{' > U+1506	] + '{' > U+1506
+ 'A' > U+148E	] + 'A' > U+148E	] + 'A' > U+148E
+ 'S' > U+1434	] + 'S' > U+1434	] + 'S' > U+1434
+ 'D' > U+1549	] + 'D' > U+1549	] + 'D' > U+1549
+ 'F' > U+1556	] + 'F' > U+1556	] + 'F' > U+1556
+ 'J' > U+152B	] + 'J' > U+152B	] + 'J' > U+152B
+ 'K' > U+1558	] + 'K' > U+1558	] + 'K' > U+1558
+ 'L' > U+15A3	] + 'L' > U+15A3	] + 'L' > U+15A3
+ 'Z' > U+1491	] + 'Z' > U+1491	] + 'Z' > U+1491
+ 'X' > U+1439	] + 'X' > U+1439	] + 'X' > U+1439
+ 'C' > U+154C	] + 'C' > U+154C	] + 'C' > U+154C
+ 'N' > U+14C8	] + 'N' > U+14C8	] + 'N' > U+14C8
+ 'M' > U+14DB	] + 'M' > U+14DB	] + 'M' > U+14DB
+ '?' > U+155A	] + '?' > U+155A	] + '?' > U+155A

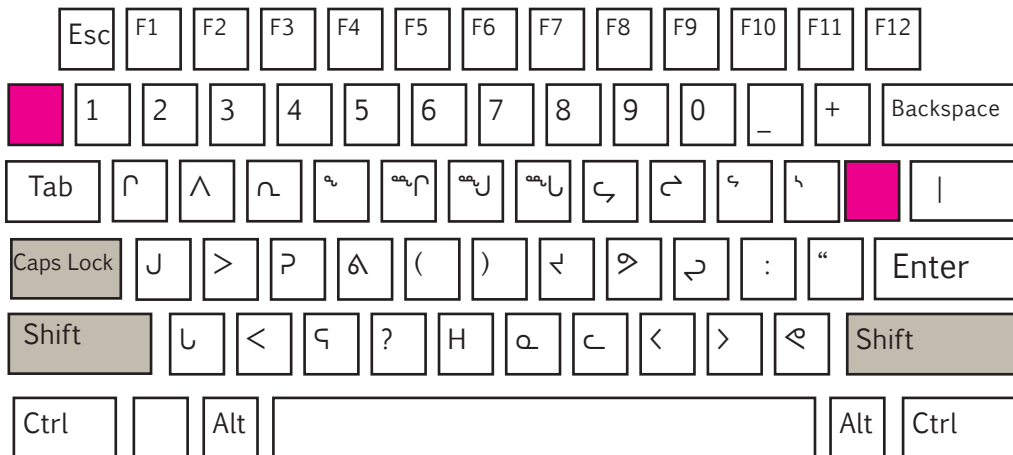
## Inuktitut Unicode Keyboard Layout - Graphic Representation

The following are visual layouts of the data presented in this section. As noted previously "Level 1" of the syllabic keyboard (CAPS LOCK OFF) is in fact the same as the US English "QWERTY" keyboard - as it is easily referenced it is not included in this section.



### Level 2 Properties: CAPS LOCK ON.

This is the base layout of the syllabic keyboard. The keys in purple (the " ` " and " | ") are identified as they are used as deadkeys shown on levels 4 and 5.

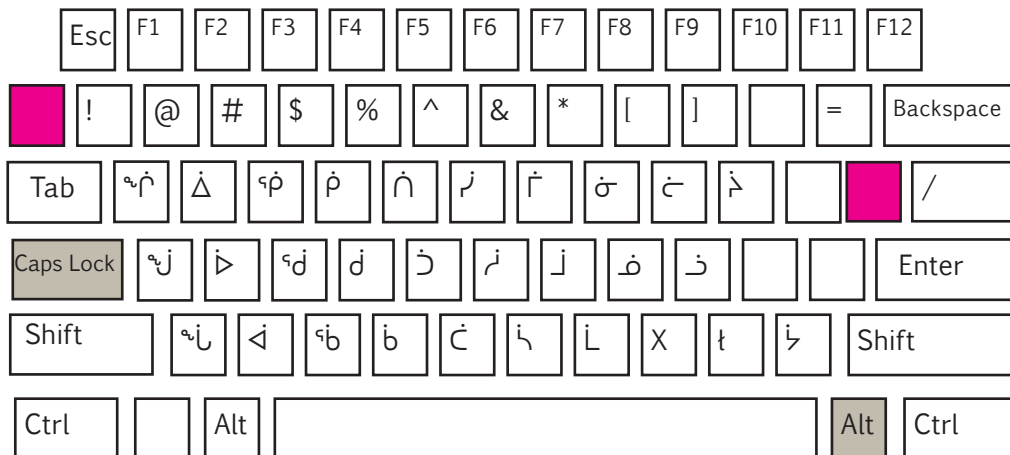


### Level 3 Properties: CAPS LOCK ON + SHIFT

This is the secondary layout of the syllabic keyboard accessed by using either shift key. The keys in purple (the " ` " and " | ") are identified as they are used as deadkeys shown on levels 4 and 5.

## Inuktitut Unicode Keyboard Layout - Graphic Representation

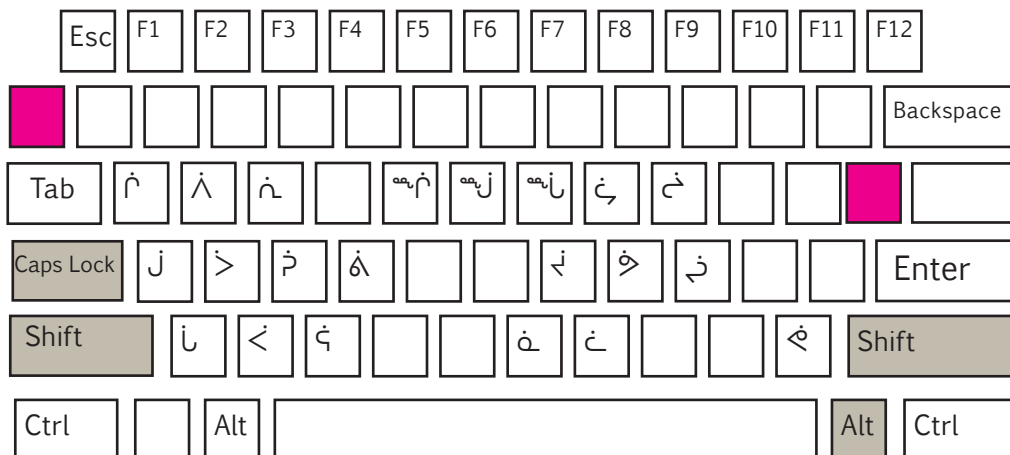
*Note: Inuktitut in Nunavut has never had a proper 8-bit font or related keyboard. As a result the next two levels are in a sense “new”. The key placement for these characters is identical to the base rows...the long character “ᐃᐅ” is in the same key position as the “ᐃᐅ”. The use of the RIGHT ALT key is new, however the retention of the ‘deadkeys’ will be familiar to most typists.*



### Level 4 Properties:

#### CAPS LOCK ON + RIGHT ALT (or deadkeys)

The 'dotted' syllabic base row characters are accessed by either a) pressing and holding the RIGHT ALT key and the desired character or b) pressing either deadkey (in purple) followed by the desired key



### Level 5 Properties:

#### CAPS LOCK ON + SHIFT + RIGHT ALT (or deadkeys)

Pressing either shift key in conjunction with the RIGHT ALT will create the above character forms. Pressing either deadkey followed by Shift and the character will also create the long form.