

BBOLDX—an extension of BBOLD

Michael Sharpe

October 18, 2021

In the 1990's, Alan Jeffrey developed an extensive Blackboard Bold font with weight a good match to Computer Modern, with upper and lower case Latin and Greek letters as well as punctuation and a number of symbols. The font was the property of Y&Y, and, after their dissolution, the copyright was gifted to TUG in 2007, with the freest license imaginable. This package extends the original by adding a couple of glyphs and, more important, adding two new weights. Where the original stem widths were 40 units, the additions have stem widths of 56 units and 90 units respectively. For a comparison, here are the three, labelled Thin, Regular and Bold respectively.

Thin: $\Sigma\beta\mathbb{H}\mathbf{k}1234567890$

Regular: $\Sigma\beta\mathbb{H}\mathbf{k}1234567890$

Bold: $\Sigma\beta\mathbb{H}\mathbf{k}1234567890$

FONT TABLE FOR BBOLDX-REGULAR:

	ó	í	î	ï	ú	û	ü	ý	
ó0x	Ɔ ₀	Δ ₁	Θ ₂	Λ ₃	Ξ ₄	Π ₅	Σ ₆	Υ ₇	"0x
ó1x	Φ ₈	Ψ ₉	Ω ₁₀	α ₁₁	β ₁₂	δ ₁₃	δ ₁₄	ε ₁₅	
ó2x	ζ ₁₆	η ₁₇	θ ₁₈	ι ₁₉	κ ₂₀	λ ₂₁	μ ₂₂	ν ₂₃	"1x
ó3x	ξ ₂₄	π ₂₅	ρ ₂₆	σ ₂₇	τ ₂₈	υ ₂₉	φ ₃₀	χ ₃₁	
ó4x	ψ ₃₂	! ₃₃	" ₃₄	# ₃₅	\$ ₃₆	% ₃₇	& ₃₈	' ₃₉	"2x
ó5x	(₄₀)) ₄₁	* ₄₂	+ ₄₃	9 ₄₄	- ₄₅	• ₄₆	/ ₄₇	
ó6x	0 ₄₈	1 ₄₉	2 ₅₀	3 ₅₁	4 ₅₂	5 ₅₃	6 ₅₄	7 ₅₅	"3x
ó7x	8 ₅₆	9 ₅₇	: ₅₈	; ₅₉	< ₆₀	• ₆₁	> ₆₂	? ₆₃	
í0x	Ɔ ₆₄	Δ ₆₅	Θ ₆₆	Λ ₆₇	Ξ ₆₈	Π ₆₉	Σ ₇₀	Υ ₇₁	"4x
í1x	Φ ₇₂	Ψ ₇₃	Ω ₇₄	α ₇₅	β ₇₆	δ ₇₇	δ ₇₈	ε ₇₉	
í2x	ζ ₈₀	η ₈₁	θ ₈₂	ι ₈₃	κ ₈₄	λ ₈₅	μ ₈₆	ν ₈₇	"5x
í3x	ξ ₈₈	π ₈₉	ρ ₉₀	σ ₉₁	τ ₉₂	υ ₉₃	φ ₉₄	χ ₉₅	
í4x	ψ ₉₆	! ₉₇	" ₉₈	# ₉₉	\$ ₁₀₀	% ₁₀₁	& ₁₀₂	' ₁₀₃	"6x
í5x	(₁₀₄)) ₁₀₅	* ₁₀₆	+ ₁₀₇	9 ₁₀₈	- ₁₀₉	• ₁₁₀	/ ₁₁₁	
í6x	0 ₁₁₂	1 ₁₁₃	2 ₁₁₄	3 ₁₁₅	4 ₁₁₆	5 ₁₁₇	6 ₁₁₈	7 ₁₁₉	"7x
í7x	8 ₁₂₀	9 ₁₂₁	: ₁₂₂	; ₁₂₃	< ₁₂₄	• ₁₂₅	> ₁₂₆	? ₁₂₇	
î0x	Ɔ ₁₂₈	Δ ₁₂₉	130	131	132	133	134	135	"8x
î1x	136	137	138	139	140	141	142	143	
	"8	"9	"A	"B	"C	"D	"E	"F	

1: LOAD THE BBOLDX PACKAGE.

```
\usepackage{bboldx} % for Regular and Bold weights
\usepackage[light]{bboldx} % for Thin and Regular weights
```

`\imathbb, \jmathbb`
`\Gammabb ... \Omegabb`
`\alphabb ... \omegabb`

There is also a `scaled` (or `scale`) option you may use to adjust the relative size of the `bboldx` glyphs. For example,

will lead to a 2% reduction of the size of the rendered `bboldx` characters.

Place one of the lines

in your document preamble following any other lines that may load math alphabets. These have the same effect as loading the `bboldx` package described above. For example,

has the same effect as

(Mathalpha does of course allow you to set many other math alphabet options.)