

Support for the Spark OpenType fonts

–
v. 0.05a

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1 Introduction

A sparkline is a very small line chart, typically drawn without axes or coordinates. It presents the general shape of the variation (typically over time) in some measurement, such as temperature or stock market price, in a simple and highly condensed way. Sparklines are small enough to be embedded in text, or several sparklines may be grouped together as elements of a small multiple. Whereas the typical chart is designed to show as much data as possible, and is set off from the flow of text, sparklines are intended to be succinct, memorable, and located where they are discussed. [5]

2 The fonts

The fonts are available from <https://github.com/aftertheflood/sparks> and should be saved either in `Library/fonts/` (MAC OSX), `c:\Windows\Fonts` (Windows) or `/usr/local/share/fonts` (Linux) or any other location where the fonts will be found by the system.

Sparks-Bar-Extranarrow.otf
Sparks-Bar-Extrawide.otf
Sparks-Bar-Medium.otf
Sparks-Bar-Narrow.otf
Sparks-Bar-Wide.otf
Sparks-Dot-Extralarge.otf
Sparks-Dot-Extrasmall.otf
Sparks-Dot-Large.otf
Sparks-Dot-Medium.otf
Sparks-Dot-Small.otf
Sparks-Dotline-Extrathick.otf
Sparks-Dotline-Extrathin.otf
Sparks-Dotline-Medium.otf
Sparks-Dotline-Thick.otf
Sparks-Dotline-Thin.otf

The package defines the following font macros (using symbol names):

```
\newfontface\sparkBarMedium{Spark-Bar-Medium}[RawFeature=+ca1t,\spark@DefaultFeatures]  
\newfontface\sparkBarNarrow{Spark-Bar-Narrow}[RawFeature=+ca1t,\spark@DefaultFeatures]  
\newfontface\sparkBarExtranarrow{Spark-Bar-Extranarrow}[RawFeature=+ca1t,\spark@DefaultFeatures]  
\newfontface\sparkBarWide{Spark-Bar-Wide}[RawFeature=+ca1t,\spark@DefaultFeatures]  
\newfontface\sparkBarExtrawide{Spark-Bar-Extrawide}[RawFeature=+ca1t,\spark@DefaultFeatures]  
%  
\newfontface\sparkDotLineMedium{Spark-Dotline-Medium}[RawFeature=+ca1t,\spark@DefaultFeatures]  
\newfontface\sparkDotLineThick{Spark-Dotline-Thick}[RawFeature=+ca1t,\spark@DefaultFeatures]  
\newfontface\sparkDotLineExtrathick{Spark-Dotline-Extrathick}[RawFeature=+ca1t,\spark@DefaultFeatures]  
\newfontface\sparkDotLineThin{Spark-Dotline-Thin}[RawFeature=+ca1t,\spark@DefaultFeatures]  
\newfontface\sparkDotLineExtrathin{Spark-Dotline-Extrathin}[RawFeature=+ca1t,\spark@DefaultFeatures]  
%  
\newfontface\sparkDotMedium{Spark-Dot-Medium}[RawFeature=+ca1t,\spark@DefaultFeatures]  
\newfontface\sparkDotSmall{Spark-Dot-Small}[RawFeature=+ca1t,\spark@DefaultFeatures]  
\newfontface\sparkDotExtralarge{Spark-Dot-Extralarge}[RawFeature=+ca1t,\spark@DefaultFeatures]  
\newfontface\sparkDotExtrasmall{Spark-Dot-Extrasmall}[RawFeature=+ca1t,\spark@DefaultFeatures]
```

3 The macros

```

\sparkBar[<Type>][<No>]{values}[<No>]
\sparkDot[<Type>][<No>]{values}[<No>]
\sparkDotLine[<Type>][<No>]{values}[<No>]
\sparkBar* [ <Type> ] [ <No> ] { values } [ <No> ]
\sparkDot* [ <Type> ] [ <No> ] { values } [ <No> ]
\sparkDotLine* [ <Type> ] [ <No> ] { values } [ <No> ]
\sparkBar[<Type>]{!value, values, ..., !value}
\sparkDot[<Type>]{!value, values, ..., !value}
\sparkDotLine[<Type>]{!value, values, ..., !value}
\sparkBar* [ <Type> ] { !value, values, ..., !value }
\sparkDot* [ <Type> ] { !value, values, ..., !value }
\sparkDotLine* [ <Type> ] { !value, values, ..., !value }

```

If [**<Type>**] is missing, **Medium** is assumed. The type is mandatory if you use the first [**<No>**] argument! The star versions are only valid for Lua^AT_EX where the values can be of any interval. They will be changed to the allowed interval:

- for `\sparkDotLine`: [0, 9]
- for all other: [0, 100]

Instead of using the optional arguments for printing the first and/or last value you can use the !-notation, then the first and/or last listed value are printed. There is no difference in using the optional arguments; it saves only some keystrokes if the printed values are the same as in the list.

4 Text examples

4.1 Bars

4.1.1 Bar-Medium

Text		Text
Text		Text
Text	14.	92 Text
Text	14.	92 Text

- 1 Text `\sparkBar{14,95,68,9,19,41,91,1,81,97,79,45,96,76,17,65,8,92} Text\`
- 2 Text `\sparkBar[Medium]{14,95,68,9,19,41,91,1,81,97,79,45,96,76,17,65,8,92} Text\`
- 3 Text `\sparkBar[Medium][14]{14,95,68,9,19,41,91,1,81,97,79,45,96,76,17,65,8,92}[92] Text\`
- 4 Text `\sparkBar{!14,95,68,9,19,41,91,1,81,97,79,45,96,76,17,65,8,!92} Text`




4 Text examples

4.1.2 Bar-Narrow

Text  Text
Text 19  8 Text
Text 19  8 Text





- 1 Text \sparkBar[Narrow]{19,32,93,4,95,46,13,23,50,86,94,68,58,41,89,57,74,8} Text\\
- 2 Text \sparkBar[Narrow][19]{19,32,93,4,95,46,13,23,50,86,94,68,58,41,89,57,74,!8} Text\\
- 3 Text \sparkBar[Narrow]{!19,32,93,4,95,46,13,23,50,86,94,68,58,41,89,57,74,!8} Text

4.1.3 Bar-Extranarrow

Text  Text
Text 19  8 Text
Text 19  8 Text





- 1 Text \sparkBar[Extranarrow]{19,32,93,4,95,46,13,23,50,86,94,68,58,41,89,57,74,8} Text\\
- 2 Text \sparkBar[Extranarrow][19]{19,32,93,4,95,46,13,23,50,86,94,68,58,41,89,57,74,!8} Text\\
- 3 Text \sparkBar[Extranarrow]{!19,32,93,4,95,46,13,23,50,86,94,68,58,41,89,57,74,!8} Text

4.1.4 Bar-Wide

Text  Text
Text 13  22 Text
Text 13  Text
Text 13  22 Text

- 1 Text \sparkBar[Wide]{13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22} Text\\
- 2 Text \sparkBar[Wide][13]{13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22}[22] Text\\
- 3 Text \sparkBar[Wide]{!13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22} Text\\
- 4 Text \sparkBar[Wide]{!13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,!22} Text

4.1.5 Bar-Extrawide

Text  Text
Text 13  22 Text
Text 13  Text
Text 13  22 Text

- 1 Text \sparkBar[Extrawide]{13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22} Text\\
- 2 Text \sparkBar[Extrawide][13]{13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22}[22] Text\\
- 3 Text \sparkBar[Extrawide]{!13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22} Text\\
- 4 Text \sparkBar[Extrawide]{!13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,!22} Text

4 Text examples

4.2 Dots

4.2.1 Dot-Medium – the default

Text Text
Text 54.....1 Text
Text 54.....1 Text

- 1 Text \sparkDot{54,39,26,65,29,58,36,99,16,56,76,69,71,77,7,40,79,1} Text\\
- 2 Text \sparkDot[Medium][54]{54,39,26,65,29,58,36,99,16,56,76,69,71,77,7,40,79,1}[1] Text\\
- 3 Text \sparkDot{!54,39,26,65,29,58,36,99,16,56,76,69,71,77,7,40,79,!1} Text

4.2.2 Dot-Small

Text Text
Text 1.....76 Text
Text 1.....76 Text

- 1 Text \sparkDot[Small]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text\\
- 2 Text \sparkDot[Small][1]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76}[76] Text\\
- 3 Text \sparkDot[Small]{!1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,!76} Text

4.2.3 Dot-Extrasmall

Text Text
Text 1.....76 Text
Text 1.....76 Text

- 1 Text \sparkDot[Extrasmall]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text\\
- 2 Text \sparkDot[Extrasmall][1]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76}[76] Text\\
- 3 Text \sparkDot[Extrasmall]{!1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,!76} Text

4.2.4 Dot-Extralarge

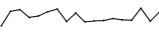
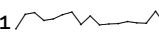
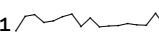
Text Text
Text 1.....76 Text
Text 1.....76 Text

- 1 Text \sparkDot[Extralarge]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text\\
- 2 Text \sparkDot[Extralarge][1]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76}[76] Text\\
- 3 Text \sparkDot[Extralarge]{!1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,!76} Text

4 Text examples

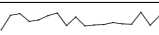
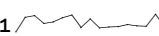
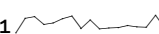
4.3 Dotline

4.3.1 Dotline-Thin

Text  Text
Text 1  76 Text
Text 1  76 Text

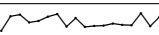
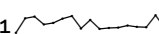
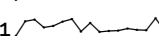
- 1 Text \sparkDotline[Thin]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text\\
- 2 Text \sparkDotline[Thin][1]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76}[76] Text\\
- 3 Text \sparkDotline[Thin]!{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,!76} Text

4.3.2 Dotline-Extrathin

Text  Text
Text 1  76 Text
Text 1  76 Text

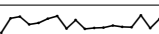
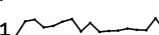
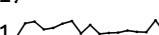
- 1 Text \sparkDotline[Extrathin]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text\\
- 2 Text \sparkDotline[Extrathin][1]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76}[76] Text\\
- 3 Text \sparkDotline[Extrathin]!{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,!76} Text

4.3.3 Dotline-Medium - the default

Text  Text
Text 1  76 Text
Text 1  76 Text

- 1 Text \sparkDotline{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text\\
- 2 Text \sparkDotline[Medium][1]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76}[76] Text\\
- 3 Text \sparkDotline!{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,!76} Text




4.3.4 Dotline-Thick

Text  Text
Text 1  76 Text
Text 1  76 Text

- 1 Text \sparkDotline[Thick]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text\\
- 2 Text \sparkDotline[Thick][1]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76}[76] Text\\
- 3 Text \sparkDotline[Thick]!{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,!76} Text

5 Examples for Lua^AT_EX

4.3.5 Dotline-Extrathick




Text  Text
Text 1  76 Text
Text 1  76 Text

- 1 Text \sparkDotline[Extrathick]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text\\
- 2 Text \sparkDotline[Extrathick][1]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76}[76] Text\\
- 3 Text \sparkDotline[Extrathick]!{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,!76} Text

5 Examples for Lua^AT_EX

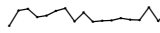

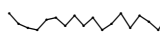
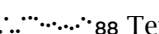
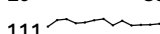
The current version of **spark-otf** supports only star versions for Lua^AT_EX.

5.1 Bars

Text  Text
Text  Text
Text  Text

- 1 Text \sparkBar*{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text\\
- 2 Text \sparkBar*{9,4,2,1,6,7,3,8,3,7,1,4,9,2,8,5,1,8} Text\\
- 3 Text \sparkBar*[Narrow]{111,179,188,146,154,177,191,124,170,122,127,129,140,133,131,195,126,176} Text\\

5.2 Dots





Text  Text
Text  Text
Text  Text
Text 19  88 Text
Text 111  176 Text

- 1 Text \sparkDotline*{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text\\
- 2 Text \sparkDotline{9,4,2,1,6,7,3,8,3,7,1,4,9,2,8,5,1,8} Text\\
- 3 Text \sparkDotline*{9,4,2,1,6,7,3,8,3,7,1,4,9,2,8,5,1,8} Text\\
- 4 Text \sparkDot*[Medium][19]{19,114,12,111,16,17,113,118,113,67,61,74,39,52,38,55,111,88}[88] Text\\
- 5 Text \sparkDotline*[Medium][111]{111,179,188,146,154,177,191,124,170,122,127,129,140,133,131,195,126,176} Text\\

6 Using color

It is possible to mark single or some values with a specific color, which must be given in binary notation, e.g. **ff0000** for red (R-G-B). The macro `\setSparkColor` *should* include the (last) comma after the value:

7 The charsets

Text 91,1,81,97,79,45,96,76,17,65,8,92} Text 14 91,1,81,97,79,45,96,76,17,65,8,92}92 Text
 Text 91,1,81,97,79,45,96,76,17,65,8,92} Text 14 91,1,81,97,79,45,96,76,17,65,8,92}92 Text

1 Text \sparkBar{14,95,68,9,19,41,\setSparkColor{ff0000}{91,1,81,97,79,45,96,76,17,65,8,92} Text
 2 \sparkBar{!14,95,68,9,19,41,\setSparkColor{ff0000}{91,1,81,97,79,45,96,76,17,65,8,92} Text
 3
 4 \bigskip
 5 \noindent
 6 Text \sparkDot{14,95,68,9,19,41,\setSparkColor{ff0000}{91,1,81,97,79,45,96,76,17,65,8,92} Text
 7 \sparkDot{!14,95,68,9,19,41,\setSparkColor{ff0000}{91,1,81,97,79,45,96,76,17,65,8,92} Text

Coloring does *not* work for the star version of the macro and *not* for \sparkDot!line.

7 The charsets

7.1 Spark-BarMedium

Table 1: Sparks-Bar-Medium.otf

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
U+F0000 - F000F	☐	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U+F0010 - F001F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U+F0020 - F002F	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
U+F0030 - F003F	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
U+F0040 - F004F	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
U+F0050 - F005F	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
U+F0060 - F006F	■	■	■	■	■	■	■	■	⓪	Ⓛ	Ⓜ	Ⓝ	Ⓞ	-	-	-

Spark-BarNarrow

Table 2: Sparks-Bar-Narrow.otf

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
U+F0000 - F000F	☐	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U+F0010 - F001F
U+F0020 - F002F
U+F0030 - F003F	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|
U+F0040 - F004F	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|
U+F0050 - F005F	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|
U+F0060 - F006F	|	|	|	|	|	|	|	|	⓪	Ⓛ	Ⓜ	Ⓝ	Ⓞ	-	-	-

Spark-BarExtraNarrow

7 The charsets

Table 3: Sparks-Bar-Extranarrow.otf

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
U+F0000 - F000F	☐	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.
U+F0010 - F001F
U+F0020 - F002F
U+F0030 - F003F	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|
U+F0040 - F004F	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|
U+F0050 - F005F	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|
U+F0060 - F006F	|	|	|	|	|	|	|	|	⓪	Ⓛ	Ⓜ	Ⓝ	Ⓟ	-	-	-

Spark-Bar-Wide

Table 4: Sparks-Bar-Wide.otf

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
U+F0000 - F000F	☐	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
U+F0010 - F001F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
U+F0020 - F002F	—	—	■	■	■	■	■	■	■	■	■	■	■	■	■	■
U+F0030 - F003F	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
U+F0040 - F004F	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
U+F0050 - F005F	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
U+F0060 - F006F	■	■	■	■	■	■	■	■	⓪	Ⓛ	Ⓜ	Ⓝ	Ⓟ	-	-	-

Spark-Bar-Extrawide

Table 5: Sparks-Bar-Extrawide.otf

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
U+F0000 - F000F	☐	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
U+F0010 - F001F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
U+F0020 - F002F	—	—	■	■	■	■	■	■	■	■	■	■	■	■	■	■
U+F0030 - F003F	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
U+F0040 - F004F	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
U+F0050 - F005F	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
U+F0060 - F006F	■	■	■	■	■	■	■	■	⓪	Ⓛ	Ⓜ	Ⓝ	Ⓟ	-	-	-

Spark-DotMedium

Table 6: Sparks-Dot-Medium.otf

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
U+F0000 - F000F	☐	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.
U+F0010 - F001F
U+F0020 - F002F
U+F0030 - F003F
U+F0040 - F004F

References

Table 6: Sparks-Dot-Medium.otf *cont.*

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
U+F0050 - F005F
U+F0060 - F006F	Ⓚ	Ⓛ	Ⓜ	Ⓝ	Ⓟ	-	-	-

Spark-DotSmall

Table 7: Sparks-Dot-Small.otf

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
U+F0000 - F000F	Ⓚ	Ⓛ
U+F0010 - F001F
U+F0020 - F002F
U+F0030 - F003F
U+F0040 - F004F
U+F0050 - F005F
U+F0060 - F006F	Ⓚ	Ⓛ	Ⓜ	Ⓝ	Ⓟ	-	-	-

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