FontRec structure

#include <Fonts.h>

typedef struct **FontRec** {

		Size	Offset	Description
short	fontType;	2	0	Font type (see defined constants, below)
short	firstChar;	2	2	ASCII code of first character defined
short	lastChar;	2	4	ASCII code of last character defined
short	widMax;	2	6	Width of widest character defined
short	kernMax;	2	8	Negative of maximum character kern
short	nDescent;	2	10	Negative of maximum distance below baseline
short	fRectWidth;	2	12	Width of font bit-image rectangle
short	fRectHeight;	2	14	Height of font bit-image rectangle
long	owTLoc;	4	16	Offset to start of offset/width table (owTable)
short	ascent;	2	20	Maximum distance above baseline (in pixels)
short	descent;	2	22	Maximum distance below baseline (in pixels)
short	leading;	2	24	Distance between lines (in pixels)
short	rowWords;	2	26	Row width of bit image /2 (ie, in 32-bit words)
		28		(size of initial part of the record)
	******* Following fields are not formally declared ********			
short	bitImage[][];			Bit image is rowWords * fRectHeight words
short	locTable[];			Locations: (lastChar-firstChar)+3 words
short	owTable[];			Offsets and widths (same size as locTable)
} **FontRec**;		28+*n*		Note: size must be < 32K with 64K ROMs

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Notes: The FontRec structure lays out the same as a 'FONT' resource. It is not accessed directly in any system function used by applications. However, it seems possible to get a handle to a 'FONT' resource, lock it in memory, and change one or more characters in the font.

In contrast to the way this record was originally formatted, the owTLoc field is a LONGINT instead of an INT, while the nDescent field has become the high-order word. The nDescent field is ignored if it is negative.

The Fonts.h header defines the following constants which might be found in the fontType field:

propFont	0x9000	Proportional font
prpFntH	0x9001	(with height table)
prpFntW	0x9002	(with width table)
prpFntHW	0x9003	(with height and width tables)
fixedFont	0xB000	Fixed-width font

fxdFntH	0xB001	(with height table)
fxdFntW	0xB002	(with width table)
fxdFntHW	0xB003	(with height and width tables)
fontWid	0xACB0	font width data only (used only in 64K ROMs)

The final three fields of FontRec vary in length, depending upon the complexity and size of the characters in the font and the number of characters which are defined.

The bitImage array is a very wide rectangle which defines the bits of all characters in the font. The last part of the image is the "missing" symbol.

The locTable field is a table of offsets, within the bitImage array. Each element contains a horizontal ordinate within the bitImage rectangle. Missing characters have the same value as as the next character in the table.

The owTable field is a table of values describing the offset (within locTable) and the width (in bits) of each character. A value of -1 (0xFFFF) means the character is undefined. Otherwise, the high byte is the offset in locTable and the low byte is the width.