| | S | F | J | C | L | M |
|---|---|---|---|---|---|---|
| BitsPerSample | 1 | 1 | 1 | 8, 12 (optional) | 1, 2-8, 9-16 | 1, 2-8, 9-16 |
| ColorMap | | | | | <n> | <n> |
| Compression | 3 | 3, 4 | 9 | 7 | 10 | 3, 4, 7, 9, 10 |
| DateTime | | optional | optional | optional | optional | optional |
| FillOrder | 2 | 1, 2 | 1, 2 | 1, 2 | 1, 2 | 1, 2 |
| ImageDescription | | optional | optional | optional | optional | optional |
| ImageLength | LONG | LONG | LONG | LONG | LONG | LONG |
| ImageWidth | 1728 | 1728, 2048, 2432, 2592, 3072, 3456, 3648, 4096, 4864 | 1728, 2048, 2432, 2592, 3072, 3456, 3648, 4096, 4864 | 864, 1024, 1216, 1728, 2048, 2432, 2592, 3072, 3456, 2648, 4096, 4864 | 864, 1024, 1216, 1728, 2048, 2432, 2592, 3072, 3456, 2648, 4096, 4864 | 864, 1024, 1216, 1728, 2048, 2432, 2592, 3072, 3456, 2648, 4096, 4864 |
| NewSubFileType | 2 | 2 | 2 | 2 | 2 | 16, 18 |
| Orientation | | optional | optional | optional | optional | optional |
| PhotometricInterpretation | 0 | 0, 1 | 0, 1 | 10 | 2, 5, 10 | 0, 1, 2, 5, 10 |
| ResolutionUnit | 2 | 2, 3 | 2, 3 | 2, 3 | 2, 3 | 2, 3 |
| RowsPerStrip | =ImageLength | LONG | LONG | LONG | LONG | LONG |
| SamplesPerPixel | 1 | 1 | 1 | 1, 3 | 1, 3, 4 | 1, 3, 4 |
| Software | | optional | optional | optional | optional | optional |
| StripByteCounts | n | <n> | <n> | <n> | <n> | <n> |
| StripOffsets | n | <n> | <n> | <n> | <n> | <n> |
| XResolution | (204, 200) | (200, 204), 300, (400, 408) | (200, 204), 300, (400, 408) | 100, 200, 300, 400 | 100, 200, 300, 400 | 100, 200, 300, 400 |
| YResolution | (98, 100), (196, 200) | (98, 100), (196, 200), 300, (391, 400) | (98, 100), (196, 200), 300, (391, 400) | 100, 200, 300, 400 | 100, 200, 300, 400 | 100, 200, 300, 400 |

| | | | | | | |
|---|---|---|---|---|---|---|
| ChromaPositioning | | | | 1 | | 1 |
| ChromaSubsampling | | | | (1, 1), (2, 2) | | (1, 1), (2, 2) |
| DocumentName | | optional | optional | optional | optional | optional |
| Indexed | | | | | 0, 1 | 0, 1 |
| PageNumber | n,m | n,m | n,m | n,m | n, m | n, m |
| SubIFDs | | | | | | LONG |
| T4Options | 0, 4 | 0, 4, 1, 5 | | | | 0, 4, 1, 5 |
| T6Options | | 0 | | | | 0 |
| XPosition | | | | | | rational |

| | | | | | | |
|---|---|---|---|---|---|---|
| YPosition | | | | | | rational |

| | | | | | | |
|---|---|---|---|---|---|---|
| BadFaxLines | | optional | | | | |
| CleanFaxLines | | optional | | | | |
| CodingMethod | | optional | optional | optional | optional | optional |
| ConsecutiveBadFaxLines | | optional | | | | |
| Decode | | | | <r> | <r> | <r> |
| DefaultImageColor | | | | | | <n> |
| FaxProfile | | optional | optional | optional | optional | optional |
| GlobalParametersIFD | | optional | optional | optional | optional | optional |
| ImageLayer | | | | | | n,m |
| ModeNumber | | | | | | n |
| ProfileType | | optional | optional | optional | optional | optional |
| VersionYear | | | | optional | optional | optional |

| | | | | | | |
|---|---|---|---|---|---|---|
| Byte order | II | II or MM | II or MM | II or MM | II or MM | II or MM |
| IFD order | sequential required | sequential recommended | sequential recommended | sequential recommended | sequential recommended | sequential recommended |

980727-01-S

**Profile S**

| **TEST CASE** | **S1** | **S2** |
|---|---|---|
| **TEST DOCUMENT** | **D01S** | **D02S** |
| *Baseline Fields* | | |
| BitsPerSample | 1 | 1 |
| ColorMap | | |
| Compression | 3 | 3 |
| DateTime | | |
| FillOrder | 2 | 2 |
| ImageDescription | | |
| ImageLength | LONG | LONG |
| ImageWidth | 1728 | 1728 |
| NewSubFileType | 2 | 2 |
| Orientation | | |
| PhotometricInterpretation | 0 | 0 |
| ResolutionUnit | 2 | 2 |
| RowsPerStrip | =ImageLength | =ImageLength |
| SamplesPerPixel | 1 | 1 |
| Software | | |
| StripByteCounts | n | n |
| StripOffsets | n | n |
| XResolution | 204 | 204 |
| YResolution | 98 | 196 |
| *Extension Fields* | | |
| ChromaPositioning | | |
| ChromaSubsampling | | |
| DocumentName | | |
| Indexed | | |
| PageNumber | n, 2 | n, 2 |
| SubIFDs | | |
| T4Options | 0 | 4 |
| T6Options | | |
| XPosition | | |
| YPosition | | |
| *New Fields* | | |
| BadFaxLines | | |
| CleanFaxLines | | |
| CodingMethod | | |
| ConsecutiveBadFaxLines | | |
| Decode | | |
| DefaultImageColor | | |
| FaxProfile | | |

| | | |
|---|---|---|
| GlobalParametersIFD | | |
| ImageLayer | | |
| ModeNumber | | |
| ProfileType | | |
| VersionYear | | |
| *File Structure* | | |
| Byte order | II | II |
| IFD order | sequential required | sequential required |

**SOURCE IMAGES**

D01S=D02S with vertical resolution halved = (S1-1, S1-2)

D02S =(F05_200.TIF, F07_200.TIF) = (S2-1, S2-2)

**TEST CASES**

| | |
|---|---|
| S1 | A4 page at 204x98, MH with non-byte aligned EOLs |
| S2 | A4 page at 204 x 196, MH with byte-aligned EOLs |

990312-01-F

**Profile F**

| **TEST CASE** | **F1** | **F2** | **F3** | **F4** | **F5** | **F6** |
|---|---|---|---|---|---|---|
| **TEST DOCUMENT** | **D01F** | **D02F** | **D03F** | **D04F** | **D05F** | **D06F** |
| *Baseline Fields* | | | | | | |
| BitsPerSample | 1 | 1 | 1 | 1 | 1 | 1 |
| ColorMap | | | | | | |
| Compression | 3 | 3 | 4 | 4 | 3 | 3 |
| DateTime | "1998:07:14 10:00:00" | | | | | |
| FillOrder | 1 | 2 | 1 | 2 | 1 | 1 |
| ImageDescription | "TIFF-FX Profile F Test File" | | | | | |
| ImageLength | LONG | LONG | LONG | LONG | LONG | LONG |
| ImageWidth | 1728 | 2592 | 3456 | 1728 | 1728 | 1728 |
| NewSubFileType | 2 | 2 | 2 | 2 | 2 | 2 |
| Orientation | 1 | 1 | 1 | 1 | 1 | 1 |
| PhotometricInterpretation | 0 | 1 | 0 | 1 | 0 | 1 |
| ResolutionUnit | 3 | 2 | 2 | 3 | 2 | 3 |
| RowsPerStrip | =ImageLength | =ImageLength | < ImageLength | =ImageLength | =ImageLength | ImageLength |
| SamplesPerPixel | 1 | 1 | 1 | 1 | 1 | 1 |
| Software | "Xerox TIFF-FX Test Code" | | | | | |
| StripByteCounts | <n> | <n> | <n> | <n> | n | <n> |
| StripOffsets | <n> | <n> | <n> | <n> | n | <n> |
| XResolution | 80 | 300 | 400 | 80 | 204 | 80 |
| YResolution | 154 | 300 | 400 | 77 | 196 | 154 |
| *Extension Fields* | | | | | | |
| ChromaPositioning | | | | | | |
| ChromaSubsampling | | | | | | |
| DocumentName | "D01F" | "D02F" | "D03F" | "D04F" | "D05F" | "D06F" |
| Indexed | | | | | | |
| PageNumber | n, 2 | n, 2 | n, 2 | n, 2 | n, 2 | n, 2 |
| SubIFDs | | | | | | |
| T4Options | 1 | 5 | | | 4 | 1 |
| T6Options | | | 0 | 0 | | |
| XPosition | | | | | | |
| YPosition | | | | | | |
| *New Fields* | | | | | | |
| BadFaxLines | 0 | | | 0 | | |
| CleanFaxLines | 0 | | | 0 | | |
| CodingMethod | 4 | | | 8 | 2 | 4 |
| ConsecutiveBadFaxLines | 0 | | | 0 | | |
| Decode | | | | | | |
| DefaultImageColor | | | | | | |
| FaxProfile | 2 | | | 2 | 2 | 2 |

| | | | | | | |
|---|---|---|---|---|---|---|
| GlobalParametersIFD | LONG | | | LONG | LONG | LONG |
| ImageLayer | | | | | | |
| ModeNumber | | | | | | |
| ProfileType | 1 | | | 1 | 1 | 1 |
| VersionYear | | | | | | |
| *File Structure* | | | | | | |
| Byte order | II | MM | MM | II | MM | II |
| IFD order | sequential | sequential | sequential | sequential | sequential | sequential |

**SOURCE IMAGES**

D01F=D03F with horizontal resolution halved = (F1-1, F1-2)
D02F=(F05_300.TIF, F07_300.TIF) = (F2-1, F2-2)
D03F=(F05_400.TIF, F07_400.TIF) = (F3-1, F3-2)
D04F=(F05_200.TIF, F07_200.TIF) = (F4-1, F4-2)
D05F=(F05_200.TIF, F07_200.TIF) = (F5-1, F5-2)
D06F=D01F with writer inverted photometric interpretation

**TEST CASES**

| | |
|---|---|
| F1 | A4 page at 80x154 cm, MR with non-byte aligned EOLs, single strip image, FillOrder=1, 1isBlack, resolution in centimeters, with GP I |
| F2 | A4 page at 300 X 300, MR with byte-aligned EOLs, single strip image, FillOrder=2, 0isBlack, resolution in inches |
| F3 | A4 page at 400 x 400, MMR, multi-strip image, FillOrder=1, 1isBlack, resolution in inches |
| F4 | A4 page at 80x77cm, MMR, single-strip image, FillOrder=2, 0isBlack, resolution in centimeters, with GP IFD |
| F5 | A4 page at 204 x 196, MH with byte aligned EOLs, single-strip image, FillOrder=1, 1isBlack, resolution in inches, with GP IFD |
| F6 | A4 page at 80x154 cm, MR with non-byte aligned EOLs, single strip image, FillOrder=1, 0 isBlack, resolution in centimeters, with GP |

**NOTE**

1. XResolution and YResolution given here in inches, when ResolutionUnit=3, use metric equivalents, e.g. XResolution=80 in place of XResoluiton=204

990312-01-J

**Profile J**

| **TEST CASE** | **J1** | **J2** |
|---|---|---|
| **TEST DOCUMENT** | **D01J** | **D02J** |
| *Baseline Fields* | | |
| BitsPerSample | 1 | 1 |
| ColorMap | | |
| Compression | 9 | 9 |
| DateTime | "1998:07:14 10:00:00" | |
| FillOrder | 1 | 2 |
| ImageDescription | "TIFF-FX Profile J Test File" | |
| ImageLength | LONG | LONG |
| ImageWidth | 2592 | 1728 |
| NewSubFileType | 2 | 2 |
| Orientation | 1 | 1 |
| PhotometricInterpretation | 0 | 0 |
| ResolutionUnit | 2 | 3 |
| RowsPerStrip | =ImageLength | =ImageLength |
| SamplesPerPixel | 1 | 1 |
| Software | "Xerox TIFF-FX Test Code" | |
| StripByteCounts | <n> | <n> |
| StripOffsets | <n> | <n> |
| XResolution | 300 | 80 |
| YResolution | 300 | 77 |
| *Extension Fields* | | |
| ChromaPositioning | | |
| ChromaSubsampling | | |
| DocumentName | "D01J" | "D02J" |
| Indexed | | |
| PageNumber | n, 2 | n, 2 |
| SubIFDs | | |
| T4Options | | |
| T6Options | | |
| XPosition | | |
| YPosition | | |
| *New Fields* | | |
| BadFaxLines | | |
| CleanFaxLines | | |
| CodingMethod | | 16 |
| ConsecutiveBadFaxLines | | |
| Decode | | |
| DefaultImageColor | | |
| FaxProfile | | 3 |

| | | |
|---|---|---|
| GlobalParametersIFD | | LONG |
| ImageLayer | | |
| ModeNumber | | |
| ProfileType | | 1 |
| VersionYear | | |
| *File Structure* | | |
| Byte order | MM | II |
| IFD order | sequential | sequential |

**SOURCE IMAGES**

D01J=(F05_300.TIF, F07_300.TIF) = (J1-1, J1-2)
D02J=(F05_200.TIF, F07_200.TIF) = (J2-1, J2-2)

**TEST CASES**

| | |
|---|---|
| J1 | A4 page at 300 X 300, JBIG, FillOrder=1, 1isBlack, resolution in inches |
| J2 | A4 page at 80 X 77 cm, JBIG, FillOrder=2, 1isBlack, resolution in centimeters, with GP IFD |

**NOTE**

1. XResolution and YResolution given here in inches, when ResolutionUnit=3, use metric equivalents, e.g. XResolution=80 in place of XResoluiton=204
2. Profile J supports only single strip images.

990312-01-C

**Profile C**

| **TEST CASE** | **C1** | **C2** | **C3** | **C4** | **C5** | **C6** |
|---|---|---|---|---|---|---|
| **TEST DOCUMENT** | **DO1C** | **DO2C** | **DO3C** | **DO4C** | **D05C** | **D06C** |
| *Baseline Fields* | | | | | | |
| BitsPerSample | 8 | 12 | 8 | 12 | 8 | 8 |
| ColorMap | | | | | | |
| Compression | 7 | 7 | 7 | 7 | 7 | 7 |
| DateTime | "1998:07:14 10:00:00" | | | | | |
| FillOrder | 1 | 2 | 1 | 2 | 1 | 2 |
| ImageDescription | "Xerox TIFF-FX Profile C Test File" | | | | | |
| ImageLength | LONG | LONG | LONG | LONG | LONG | LONG |
| ImageWidth | 864 | 3456 | 1728 | 864 | 1728 | 1728 |
| NewSubFileType | 2 | 2 | 2 | 2 | 2 | 2 |
| Orientation | 1 | 1 | 1 | 1 | 1 | 1 |
| PhotometricInterpretation | 10 | 10 | 10 | 10 | 10 | 10 |
| ResolutionUnit | 2 | 2 | 2 | 2 | 2 | 2 |
| RowsPerStrip | =ImageLength | =ImageLength | =ImageLength | =ImageLength | =ImageLength | =ImageLength |
| SamplesPerPixel | 1 | 1 | 3 | 3 | 3 | 3 |
| Software | "Xerox TIFF-FX Test Code" | | | | | |
| StripByteCounts | <n> | <n> | <n> | <n> | <n> | <n> |
| StripOffsets | <n> | <n> | <n> | <n> | <n> | <n> |
| XResolution | 100 | 400 | 200 | 100 | 200 | 200 |
| YResolution | 100 | 400 | 200 | 100 | 200 | 200 |
| *Extension Fields* | | | | | | |
| ChromaPositioning | | | 1 | 1 | 1 | 1 |
| ChromaSubsampling | | | (2, 2) | (1, 1) | (1, 1) | (2, 2) |
| DocumentName | "DO1C" | "DO2C" | "DO3C" | "D04C" | "DO5C" | "DO6C" |
| Indexed | | | | | | |
| PageNumber | n, 2 | n, 2 | n, 2 | n, 2 | n, 2 | n, 2 |
| SubIFDs | | | | | | |
| T4Options | | | | | | |
| T6Options | | | | | | |
| XPosition | | | | | | |
| YPosition | | | | | | |
| *New Fields* | | | | | | |
| BadFaxLines | | | | | | |
| CleanFaxLines | | | | | | |
| CodingMethod | | 32 | 32 | | 32 | 32 |
| ConsecutiveBadFaxLines | | | | | | |
| Decode | <r> | <r> | <r> | <r> | <r> | <r> |
| DefaultImageColor | | | | | | |
| FaxProfile | | 4 | 4 | | 4 | 4 |

| | | | | | | |
|---|---|---|---|---|---|---|
| GlobalParametersIFD | | LONG | LONG | | LONG | LONG |
| ImageLayer | | | | | | |
| ModeNumber | | | | | | |
| ProfileType | | 1 | 1 | | 1 | 1 |
| VersionYear | | '1997' | 1998' | | '1997' | '1997' |
| *File Structure* | | | | | | |
| Byte order | II | MM | II | MM | II | II |
| IFD order | sequential | sequential | sequential | sequential | sequential | sequential |

**SOURCE IMAGES**

D01C=300 ppi version of D02C = (C1-1, C1-2)
D02C=(F18_400.TIF, gray version of F21a400.TIF) = (C2-1, C2-2)
D03C=(F21a200.TIF, 200 ppi version of F21b400.TIF) = (C3-1, C3-2)
DO4C=100 ppi version of D03C = (C4-1, C4-2)
D05C=same as D03C
D06C=same as D03C

**TEST CASES**

| | |
|---|---|
| C1 | A4 page at 300 X 300, JPEG, 1 sample per pixel, 8 Bits per sample, FillOrder=1, resolution in inches |
| C2 | A4 page at 400 X 400, JPEG, 1 sample per pixel, 12 Bits per sample, FillOrder=2, resolution in inches, with GP IFD |
| C3 | A4 page at 200 X 200, JPEG, 3 sample per pixel, 8 Bits per sample, FillOrder=1, resolution in inches, with GP IFD |
| C4 | A4 page at 100 X 100, JPEG, 3 sample per pixel, 12 Bits per sample, FillOrder=2, resolution in inches |
| C5 | same as C3 but with ChromaSubsampling=(1, 1) and GPIFD |
| C6 | same as C3 but with FillOrder=2, non-default Decode value and GPIFD |

**NOTE**

1. Profile C uses only inch based square resolution, XResolution and YResolution given in inches and are identical.
2. Profile C supports only single strip images.
3. Decode values depend on color conversion: C1-C5 can use default

990312-01-L

**Profile L**

| **TEST CASE** | **L1** | **L2** | **L3** | **L4** | **L5** | **L6** |
|---|---|---|---|---|---|---|
| **TEST DOCUMENT** | **D01L** | **D02L** | **D03L** | **D04L** | **D05L** | **D06L** |
| *Baseline Fields* | | | | | | |
| BitsPerSample | 1 | 1 | 1 | 8 | 12 | 8 |
| ColorMap | | | | <n> | | |
| Compression | 10 | 10 | 10 | 10 | 10 | 10 |
| DateTime | "1998:07:14 10:00:00" | | | | | |
| FillOrder | 2 | 1 | 2 | 1 | 2 | 2 |
| ImageDescription | **"TIFF-FX Profile L Test File"** | | | | | |
| ImageLength | LONG | LONG | LONG | LONG | LONG | LONG |
| ImageWidth | 3456 | 3456 | 2592 | 1728 | 864 | 1728 |
| NewSubFileType | 2 | 2 | 2 | 2 | 2 | 2 |
| Orientation | 1 | 1 | 1 | 1 | 1 | 1 |
| PhotometricInterpretation | 2 | 5 | 5 | 10 | 10 | 10 |
| ResolutionUnit | 2 | 2 | 2 | 2 | 2 | 2 |
| RowsPerStrip | =ImageLength | =ImageLength | =ImageLength | =ImageLength | =ImageLength | =ImageLength |
| SamplesPerPixel | 3 | 3 | 4 | 1 | 3 | 3 |
| Software | "Xerox TIFF-FX Test Code" | | | | | |
| StripByteCounts | <n> | <n> | <n> | <n> | <n> | <n> |
| StripOffsets | <n> | <n> | <n> | <n> | <n> | <n> |
| XResolution | 400 | 400 | 300 | 200 | 100 | 200 |
| YResolution | 400 | 400 | 300 | 200 | 100 | 200 |
| *Extension Fields* | | | | | | |
| ChromaPositioning | | | | | | |
| ChromaSubsampling | | | | | | |
| DocumentName | "D01L" | "D02L" | "D03L" | "D04L" | "D05L" | "D06L" |
| Indexed | | | | 1 | | |
| PageNumber | n, 2 | n, 2 | n, 2 | n, 2 | n, 2 | n, 2 |
| SubIFDs | | | | | | |
| T4Options | | | | | | |
| T6Options | | | | | | |
| XPosition | | | | | | |
| YPosition | | | | | | |
| *New Fields* | | | | | | |
| BadFaxLines | | | | | | |
| CleanFaxLines | | | | | | |
| CodingMethod | 64 | | | 64 | | 64 |
| ConsecutiveBadFaxLines | | | | | | |
| Decode | | | | <r> | <r> | <r> |
| DefaultImageColor | | | | | | |
| FaxProfile | 5 | | | 5 | | 5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GlobalParametersIFD | | LONG | | | LONG | | LONG |
| ImageLayer | | | | | | | |
| ModeNumber | | | | | | | |
| ProfileType | | 1 | | | 1 | | 1 |
| VersionYear | | '1997' | | | '1998' | | '1997' |
| | *File Structure* | | | | | | |
| Byte order | | MM | MM | II | II | II | II |
| IFD order | | sequential | sequential | sequential | sequential | sequential | sequential |

**SOURCE IMAGES**

DO1L= (L1-1, L1-2)
D02L= (L1-1, L1-2)
D03L= (L3-1, L3-2)
D04L= (L4-1, L4-2)
D05L= (C4-1, C4-2)
D06L= (L6-1, L6-2)
D07L=(L7-1, L7-2)
D08L=(L8-1, L8-2)

**TEST CASES**

| | |
|---|---|
| L1 | 1-bit RGB |
| L2 | 1-bit CMY |
| L3 | 1-bit CMYK |
| L4 | 8-bit ITULAB Palette |
| L5 | 12-bit ITULAB |
| L6 | 8-bit ITULAB |
| L7 | 4-bit ITULAB |
| L8 | 8-bit L* (ITULAB gray) |

**NOTE**

1. Profile L uses only inch based square resolution, XResolution and YResolution given in inches and are identical.
2. Profile L supports only single strip images.
3. L2 requires conversion of L1 source images from RGB to CMY
4. L4 source uses RGB Palette, which requires conversion to ITULAB palette
5. L7 source uses 4-bit RGB, which requires conversion to ITULAB
6. Page 2 source image is landscape; use of Orientation=8 is optional

| **L7**<br>**D07L** | **L8**<br>**D08L** |
| --- | --- |
| 4 | 8 |
| 10 | 10 |
| 2 | 1 |
| LONG | LONG |
| 1728 | 864 |
| 2 | 2 |
| 1 | 1 |
| 10 | 10 |
| 2 | 2 |
| =ImageLength | =ImageLength |
| 3 | 1 |
| <n> | <n> |
| <n> | <n> |
| 200 | 100 |
| 200 | 100 |
| "D07L" | "D08L" |
| n, 2 | n, 2 |
| 64 | |
| <r> | <r> |
| 5 | |


ll
sequential

II
sequential

990312-01-M

**Profile M**

| **TEST CASE** | **M1** | **M2** | **M3** | **M4** | **M5** | **M6** |
|---|---|---|---|---|---|---|
| **TEST DOCUMENT** | **D01M** | **D02M** | **D03M** | **D04M** | **D05M** | **D06M** |
| *Baseline Fields* | | | | | | |
| BitsPerSample | 8/1/8 | 8/1/8 | 8/1/8 | 8/1/8 | 8/1/- | -/1/8 |
| ColorMap | | | | | | |
| Compression | 7/3/7 | 7/4/7 | 7/4/7 | 7/4/7 | 7/4/- | -/3/7 |
| DateTime | | | | | | "1998:07:14 |
| FillOrder | 2/2/2 | 1/1/1 | 1/1/1 | 2/2/2 | 2/2/- | -/1/1 |
| ImageDescription | | | | | | **TIFF-FX Profi** |
| ImageLength | LONG | LONG | LONG | LONG | LONG | LONG |
| ImageWidth | 1728 | 3456 | 2592 | 3456 | 1728 | 2592 |
| NewSubFileType | 16/18/16 | 16/18/16 | 16/18/16 | 16/18/16 | 16/18/- | -/18/16 |
| Orientation | 1 | 1 | 1 | 1 | 1 | 1 |
| PhotometricInterpretation | 10/0/10 | 10/0/10 | 10/0/10 | 10/0/10 | 10/0/- | -/0/10 |
| ResolutionUnit | 2 | 2 | 2 | 2 | 2 | 2 |
| RowsPerStrip/StripRowCount | <ImageLength | =ImageLength | <ImageLength | <ImageLength | <ImageLength | =ImageLength |
| SamplesPerPixel | 3/1/3 | 3/1/3 | 3/1/3 | 3/1/3 | 3/1/- | -/1/3 |
| Software | | | | | | "Xer |
| StripByteCounts | <n>/<n>/<n> | <n>/<n>/<n> | <n>/<n>/<n> | <n>/<n>/<n> | <n>/<n>/- | -/<n>/<n> |
| StripOffsets | <n>/<n>/<n> | <n>/<n>/<n> | <n>/<n>/<n> | <n>/<n>/<n> | <n>/<n>/- | -/<n>/<n> |
| XResolution | 200/200/200 | 100/400/200 | 100/300/100 | 200/400/200 | 100/200/- | -/200/200 |
| YResolution | 200/200/200 | 100/400/200 | 100/300/100 | 200/400/200 | 100/200/- | -/200/200 |
| *Extension Fields* | | | | | | |
| ChromaPositioning | 1/-/1 | 1/-/1 | 1/-/1 | 1/-/1 | 1/-/1 | -/-/1 |
| ChromaSubsampling | (2, 2)/-/(2, 2) | (1, 1)/-/(2, 2) | (2, 2)/-/(2,2) | (2, 2)/-/(2,2) | (2, 2)/-/- | -/-/(2, 2) |
| DocumentName | "D01M" | "D02M" | "D03M" | "D04M" | "D05M" | "D06M" |
| Indexed | | | | | | |
| PageNumber | n, 2 | n, 2 | n, 2 | n, 2 | n, 2 | n, 2 |
| SubIFDs | <IFD> | <IFD> | <IFD> | <IFD> | <IFD> | <IFD> |
| T4Options | 0 | | | | | 4 |
| T6Options | | 0 | 0 | 0 | 0 | |
| XPosition | 0/-/0 | 0/-/0 | 0/-/0 | r/-/r | r/-/- | -/-/r |
| YPosition | r/-/r | 0/-/0 | r/-/r | r/-/r | r/-/- | -/-/r |
| New Fields | | | | | | |
| BadFaxLines | | | | | | |
| CleanFaxLines | | | | | | |
| CodingMethod | | 40 | 40 | 40 | 40 | 34 |
| ConsecutiveBadFaxLines | | | | | | |
| Decode | <r>/-/<r> | <r>/-/<r> | <r>/-/<r> | <r>/-/<r> | <r>/-/- | -/-/<r> |
| DefaultImageColor | -/-/- | -/-/- | <n>/-/<n> | <n>/-/<n> | -/-/- | -/-/- |

| | | | | | | |
|---|---|---|---|---|---|---|
| FaxProfile | | 6 | 6 | 6 | 6 | 6 |
| GlobalParametersIFD | | LONG | LONG | LONG | LONG | LONG |
| ImageLayer | (1, n)/(2, 1)/(3, n) | (1, 1)/(2, 1)/(3, 1) | (1, n)/(2, 1)/(3, n) | (1, n)/(2, 1)/(3, n) | (1, n)/(2, 1)/- | -/(2, 1)/(3, 1) |
| ModeNumber | | 0 | 0 | 0 | 0 | 0 |
| ProfileType | | 1 | 1 | 1 | 1 | 1 |
| VersionYear | | '1999' | "1999' | "1999' | "1999' | "1999' |
| *File Structure* | | | | | | |
| Byte order | II | II | MM | II | II | II |
| IFD order | sequential | sequential | sequential | sequential | sequential | sequential |

**SOURCE IMAGES**

see file: Sources-ProfileM.doc

**TEST CASES**

| | |
|---|---|
| M1 | 3-layer, 200/200/200 res, JPEG/MH/JPEG, multi-strip image all 256, use RowsPerStrip, FillOrder=2, little-endian, without GP IFD |
| M2 | 3-layer, 100/400/200 res, JPEG/MMR/JPEG, BG ChromaSubsampling =(1, 1), single strip image, FG default not B, FillOrder=1, little-endian |
| M3 | 3-layer, 100/300/100 res, JPEG/MMR/JPEG, multi-strip image, use StripRowCounts, at least one BG & FG strip w/o coded data, BG & FG default colors not b & w, FillOrder=2, big-endian |
| M4 | 3-layer, 200/400/200 res, JPEG/MMR/JPEG, multi-strip image, StripRowCounts, BG & FG have at least one strip w/XPosition >0, FG default color changes between strip, FillOrder=1, big-endian |
| M5 | 2-layer BG&M, >2 IFDs, 100/200/-, JPEG/MMR/-, multi-strip image, at least one strip w/o coded data, at least one strip w/XPosition>0 |
| M6 | 2-layer M&FG, 2 IFDs, -/200/200, -/MH/JPEG, single strip image |
| M7 | 1-layer M, >3 IFDs, -/200/-, -/MMR/-, multi-strip image, BG & FG Default colors change between strips |
| M8 | 1-layer BG, >2 IFD, 100/100/-, JPEG/MMR/-, multi-strip image, at least one strip w/o coded data, at least one strip w/Xposition>0, Note: generate virtual mask data of all 0's |
| M9 | 1-layer FG, 1 IFD, -/-/200, -/-/JPEG, single strip image, without GP IFD |
| M10 | 1-layer M, 1 IFD, -/200/-, -/MMR/-, single-strip image |
| M11 | same as M4, but with JPEG/JBIG/JBIG |
| M12 | same as M4 (page 1), but with JPEG/MMR/JBIG and different color spaces in Foreground (1-bit RGB) and Background (8-bit ITULAB) |

**NOTES**

1. Profile M data is represented in sequence of BG/Mask/FG.
2. Profile M uses only inch based square resolution, XResolution and YResolution given in inches and are identical.
3. StripRowCounts and RowsPerStrip are used alternately, they MUST NOT appear together.
4. There is a one-to-one correspondence between each occurrence and the dimension of Fax stripes and TIFF strips. For every fax stripe there is one TIFF strip and they have the same dimensions.
5. DefaultImagerColor = -/-/- means a default image color need not be specified, i.e. the default DefaultImageColor applies
6. Changes to the previous version of the test cases are shown in red.

| M7<br>D07M | M8<br>D08M | M9<br>D09M | M10<br>D10M | M11<br>D11M | M12<br>D12M |
|---|---|---|---|---|---|
| -/1/- | 8/1/- | -/-/8 | -/1/- | 8/1/8 | 8/1/1 |
| | | | | | |
| -/4/- | 7/4/- | -/-/7 | -/4/- | 7/9/10 | 7/4/10 |
| 4 10:00:00" | | | | | |
| -/1/- | 2/2/- | -/-/1 | -/1/- | 2/2/2 | 1/1/1 |
| **le M Test File** | | | | | |
| LONG | LONG | LONG | LONG | LONG | LONG |
| 1728 | 864 | 2592 | 1728 | 3456 | 3456 |
| 16/18/16 | 16/18/- | -/-/18 | -/18/- | 16/18/16 | 16/18/16 |
| 1 | 1 | 1 | 1 | 1 | 1 |
| -/0/- | 10/0/- | -/-/10 | -/0/- | 10/9/10 | 10/9/2 |
| 2 | 2 | 2 | 2 | 2 | 2 |
| <ImageLength | <ImageLength | =ImageLength | =ImageLength | <ImageLength | <ImageLength |
| -/1/- | 3/1/- | -/-/3 | -/1/- | 3/1/3 | 3/1/3 |
| ox TIFF-FX Test Code" | | | | | |
| 0/<n>/0 | <n>/<n>/- | -/-/<n> | -/<n>/- | <n>/<n>/<n> | <n>/<n>/<n> |
| -/<n>/- | <n>/<n>/- | -/-/<n> | -/<n>/- | <n>/<n>/<n> | <n>/<n>/<n> |
| -/200/- | 100/100/- | -/-/200 | -/200/- | 200/400/200 | 200/400/200 |
| -/200/- | 100/100/- | -/-/200 | -/200/- | 200/400/200 | 200/400/200 |
| | | | | | |
| | 1/-/- | -/-/1 | | 1/-/- | 1/-/- |
| | (2, 2)/-/- | -/-/(2, 2) | | (2, 2)/-/- | (2, 2)/-/- |
| "D07M" | "D08M" | "D09M" | "D10M" | "D11M" | "D12M" |
| | | | | | |
| n, 1 | n, 2 | n, 2 | n, 2 | n, 2 | n, 1 |
| <IFD> | <IFD> | | | <IFD> | <IFD> |
| | | | | | |
| 0 | 0 | | 0 | | |
| 0/-/0 | r/-/- | -/-/0 | -/-/- | r/-/r | r/-/r |
| r/-/r | r/-/- | -/-/0 | -/-/- | r/-/r | r/-/r |
| | | | | | |
| | | | | | |
| 8 | 40 | | 8 | 112 | 104 |
| | | | | | |
| | <r>/-/- | -/-/<r> | | <r>/-/<r> | <r>/-/<r> |
| <n>/-/<n> | -/-/- | -/-/- | -/-/- | -/-/n | -/-/- |

| | | | | | |
|---|---|---|---|---|---|
| 6 | 6 | | 6 | 6 | 6 |
| LONG | LONG | | LONG | LONG | LONG |
| (1, n)/(2, 1)/(3, n) | (1, 1)/2, 1)/- | -/-/(3, 1) | -/(2, 1)/- | (1, 1)/(2, 1)/(3, n) | (1, n)/(2, 1)/(3, n) |
| 0 | 0 | | 0 | 0 | 0 |
| 1 | 1 | | 1 | 1 | 1 |
| "1999' | "1999' | | "1999' | "1999' | "1999' |
| | | | | | |
| MM | ll | MM | MM | II | II |
| sequential | sequential | sequential | sequential | sequential | sequential |