

# QuickTime

## Leaf Atom

<Atom Size> Byte

| Atom Header |           |                                    | Atom Data |     |         |
|-------------|-----------|------------------------------------|-----------|-----|---------|
| Atom Size   | Atom Type | Extended Size<br><i>(optional)</i> | Field 1   | ... | Field n |

4 Byte

4 Byte

8 Byte

## Container Atom

<Atom Size> Byte

| Atom Header |           |                                    | Child Atoms  |     |              |
|-------------|-----------|------------------------------------|--------------|-----|--------------|
| Atom Size   | Atom Type | Extended Size<br><i>(optional)</i> | Child Atom 1 | ... | Child Atom n |

4 Byte

4 Byte

8 Byte

QT Atom

<Atom Size> or <Extended Size> Byte

| QT Atom Header |           |                                    |         |                  |             |                    | Atom Data |
|----------------|-----------|------------------------------------|---------|------------------|-------------|--------------------|-----------|
| Atom Size      | Atom Type | Extended Size<br><i>(optional)</i> | Atom ID | Reserved<br>=00h | Child Count | Reserved<br>=0000h |           |

4 Byte

4 Byte

8 Byte

4 Byte

2 Byte

2 Byte

4 Byte

## QT Atom Container

| QT Atom Container      |            |           |     |           |
|------------------------|------------|-----------|-----|-----------|
| Reserved               | Lock Count | QT Atom 1 | ... | QT Atom n |
| =00000000000000000000h | =0000h     |           |     |           |

10 Byte

2 Byte

## QuickTime File

|                         |           |                         |                           |     |                           |                           |                           |
|-------------------------|-----------|-------------------------|---------------------------|-----|---------------------------|---------------------------|---------------------------|
| ftyp Atom<br>(optional) | moov Atom | pnot Atom<br>(optional) | mdat Atom 1<br>(optional) | ... | mdat Atom n<br>(optional) | free Atom n<br>(optional) | skip Atom n<br>(optional) |
|-------------------------|-----------|-------------------------|---------------------------|-----|---------------------------|---------------------------|---------------------------|

*Movie Atom*

<Atom Size> or <Extended Size> Byte

| Movie Atom Header |                    |                                      | Atom Data (in arbitrary order)      |                   |                                      |                                     |     |                                     |                                       |   |  |   |
|-------------------|--------------------|--------------------------------------|-------------------------------------|-------------------|--------------------------------------|-------------------------------------|-----|-------------------------------------|---------------------------------------|---|--|---|
| Atom Size         | Atom Type<br>=moov | Extended Size<br>( <i>optional</i> ) | Profile Atom<br>( <i>optional</i> ) | Movie Header Atom | Clipping Atom<br>( <i>optional</i> ) | Track Atom 1<br>( <i>optional</i> ) | ... | Track Atom n<br>( <i>optional</i> ) | User Data Atom<br>( <i>optional</i> ) | Color Table Atom<br>( <i>optional</i> ) | Compressed Movie Atom<br>( <i>optional</i> ) | Reference Movie Atom<br>( <i>optional</i> ) |

4 Byte

4 Byte

8 Byte

## Track Atom

&lt;Atom Size&gt; Byte

| Track Atom Header |                    | Atom Data (in arbitrary order)   |                   |                             |                                |                         |                                    |  |                                    |            |                              |
|-------------------|--------------------|----------------------------------|-------------------|-----------------------------|--------------------------------|-------------------------|------------------------------------|--|------------------------------------|------------|------------------------------|
| Atom Size         | Atom Type<br>=trak | Track Profile Atom<br>(optional) | Track Header Atom | Clipping Atom<br>(optional) | Track Matte Atom<br>(optional) | Edit Atom<br>(optional) | Track Reference Atom<br>(optional) | Track Load Settings Atom<br>(optional) | Track Input Map Atom<br>(optional) | Media Atom | User Data Atom<br>(optional) |