Dorian's (limited) list of things he was able to understand from the OpenGL driver for the Videocore 6 (V3D) in the Raspberry Pi 4 BCM 2711.

Control IDs are 1 byte

Binning Control List:

```
NUMBER_OF_LAYERS (set to 1)

TILE_BINNING_MODE_CFG


FLUSH_VCD_CACHE ( not sure this is required)

OCCLUSION_QUERY_COUNTER (not sure this is required)

START_TILE_BINNING
```

^ This stuff is kept consistent and only set once.

```
CLIP_WINDOW

CFG_BITS

CLIPPER_XY_SCALING (not sure this is required)

CLIPPER_Z_SCALE_AND_OFFSET (not sure this is required)

CLIPPER_Z_MIN_MAX_CLIPPING_PLANES (not sure this is required)

VIEWPORT_OFFSET
```

Indirect Control List??:

Not sure what this does yet, it doesn't seem to be sent to the HW at all.

Rendering Control List:

This is populated during glSwapBuffers, called in v3dx_rcl.c in

```
v3dX(emit_rcl)(struct v3d_job *job)
```

```
TILE_RENDERING_MODE_CFG_COMMON (OPCODE 121)

TILE_RENDERING_MODE_CFG_CLEAR_COLORS_PART1

TILE_RENDERING_MODE_CFG_ZS_CLEAR_VALUES

TILE_LIST_INITIAL_BLOCK_SIZE

MULTICORE_RENDERING_TILE_LIST_SET_BASE

MULTICORE_RENDERING_SUPERTILE_CFG

TILE_COORDINATES
```

END_OF_LOADS

STORE_TILE_BUFFER_GENERAL

CLEAR_TILE_BUFFERS

END_OF_TILE_MARKER

TILE_COORDINATES

END_OF_LOADS

STORE_TILE_BUFFER_GENERAL

END_OF_TILE_MARKER

FLUSH_VCD_CACHE

For each tile:

SUPERTILE_COORDINATES