

B Compilation Algorithm

```
function Compile( $S$ )  
begin  
  ( $\mathcal{A}_1^{\text{data}}$ ,  $\mathcal{A}_1^{\text{ctrl}}$ ) := CompileSurface( $C0$ ,  $st$ ,  $S$ )  
  ( $\mathcal{A}_2^{\text{data}}$ ,  $\mathcal{A}_2^{\text{ctrl}}$ ) := CompileDepth( $C0$ ,  $S$ )  
  return ( $\mathcal{A}_1^{\text{data}} \cup \mathcal{A}_2^{\text{data}}$ ,  $\mathcal{A}_1^{\text{ctrl}} \cup \mathcal{A}_2^{\text{ctrl}}$ )  
end
```