

```

// Code for the second pass of a program that classifies Ethernet frames

// Symbolic constants used for classifications

#define FRAMETYPEA  1      // ARP frames
#define FRAMETYPEI  2      // IP frames
#define FRAMETYPEO  3      // Other frames (not the above)

SETUP  REPLAYROOT(HandleFrame);

// Pass 2

HandleFrame:
    fSkip(96)                // skip past dest & src addresses
    cl = CLASS                // compute class from frame type
    fSkipToEnd()
    fTransmit(1:1, cl:21, 0:16, 0:5, 0:10, 0:24);

CLASS: 0x0806:16            fReturn(FRAMETYPEA);
CLASS: 0x0800:16            fReturn(FRAMETYPEI);
CLASS: BITS:16              fReturn(FRAMETYPEO);

```

Figure 20.4 Example FPL code for the second pass of a program that classifies each Ethernet frame into one of three categories.