

DiSEqC for the GenPix Skywalker-1 BDA Driver (Extended)

Implementation Guidelines for Applications

I. GUID for the SkyWalker1 Extended property

```
//Used to extend the feature of the BDA
//{0B5221EB-F4C4-4976-B959-EF74427464D9}
#define STATIC_KSPROPSETID_BdaExtendedProperty \
    0x0B5221EB, 0xF4C4, 0x4976, 0xB9, 0x59, 0xEF, 0x74, 0x42, 0x74, 0x64, 0xD9
DEFINE_GUIDSTRUCT("0B5221EB-F4C4-4976-B959-EF74427464D9", KSPROPSETID_BdaExtendedProperty);
#define KSPROPSETID_BdaExtendedProperty DEFINE_GUIDNAMED(KSPROPSETID_BdaExtendedProperty)
```

II. Extended Property List (Only DiSEqC support is extended)

```
//Extended Property List
typedef enum __KSPROPERTY_EXTENDED
{
    /* DiSEqC Command */
    //Used to send the Digital Sattelite Equipment Control (DiSEqC)
    //Commands by application
    KSPROPERTY_BDA_DISEQC = 0, //Extension Property 1
}KSPROPERTY_EXTENDED;
```

III. Enumeration for the Simple Tone Burst

```
typedef enum enSimpleToneBurst
{
    SEC_MINI_A,
    SEC_MINI_B
}SIMPLE_TONE_BURST;
```

IV. DiSEqC Command Structure

```
typedef struct __DISEQC_COMMAND
{
    UCHAR ucMessage[MAX_DISEQC_COMMAND_LENGTH]; /*Byte - 0 : Framing,
                                                    Byte - 1 : Address,
                                                    Byte - 2 : Command,
                                                    Byte - 3 : Data[0],
                                                    Byte - 4 : Data[1],
                                                    Byte - 5 : Data[2]
                                                    */
    UCHAR ucMessageLength; /* The Valid values for DiSEqC Command are 3...6
                            If this value is 1 then the Byte 0 is taken as Simple "Tone Burst"
                            Control Command */
}DISEQC_COMMAND, *PDISEQC_COMMAND;
```

V. Operation:

- I. To send the Simple burst command
 - a. Create the DISEQC_COMMAND Structure
 - b. Set the ucMessage[0] to either SEC_MINI_A or SEC_MINI_B
 - c. Set the ucMessageLength as 1
- II. To send the DiSEqC commands
 - a. Create the DISEQC_COMMAND Structure
 - b. Set the Framing value to ucMessage[0] e.g. E0
 - c. Set the Device Address to ucMessage[1] e.g. 01
 - d. Send the Command for the Device to ucMessage[2]
 - e. If require set the Data bytes ucMessage[3], ucMessage[4], ucMessage[5]
 - f. Set the ucMessageLength accordingly. Valid ucMessageLength values are 3 to 6.