**STM32 Bluetooth:**

1. Project Name (Kicad): STM32withBle

#Questions:

1. What is ESD Suppressor?

# links and info form video

[SUPPORT] Hardware design courses: [https://phils-lab-shop.fedevel.education](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbTkxX2doMmliZlFIMG82enFnQUs1eGpRTUphQXxBQ3Jtc0ttUnhJRE8yZS1jU012WGp0WDJLakpvNGlZZVp3VWV0d2tFUXc2eWN0Z0VXYTliSFFIVl8zYmk0VFViZ3owaThQVDJ5cENZWDBBRFNUT21HVWVsaUNxR2xnUDl1ODl1RHRkOVUxdWRpRmRMYi1nLWFtaw&q=https%3A%2F%2Fphils-lab-shop.fedevel.education%2F&v=nkHFoxe0mrU)

Course content: [https://www.phils-lab.net/courses](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbDFIWFljUFUwQ05vYVhfa2NJZmhBNUFVWE55d3xBQ3Jtc0tsNXhsTC1ZbC1tbGVQaGhqa2pWRGZpYXIwOXpsanB4anIwRXBuSXl6THcyNGFEcU1SdDhiSmY4ZEdldUtXRnBjVTFQZFVEd2ExazN1OGVTeVZWUnNVR0QtR0FaOTJBc1JFYXRNRUkyekhuQmNGSk1WUQ&q=https%3A%2F%2Fwww.phils-lab.net%2Fcourses&v=nkHFoxe0mrU)

Patreon: [ / phils94](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbElpTlQxajNDekFVaEJFcFo4R3dEVXRjM1FpQXxBQ3Jtc0ttY2gyX0JTclZES0VkbU9pNkRGTlhDSm4zelpGWnllVDNSTG4tTi1mVUhZR0pkbWt6VWZwWUhFZWY0cU5zdW1qNjNJek1YMGdGX3owc1RISVdobG13QUxIMUFLc3ZMVEFFcXRsT2EwaVJVOTd3dGNIWQ&q=https%3A%2F%2Fwww.patreon.com%2Fphils94&v=nkHFoxe0mrU)

Tag-Connect: [https://www.tag-connect.com/solutions...](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbHlFQjZUODhpQ1RFT1puVDg4RE93Z29tLUFGd3xBQ3Jtc0ttcWRLUXNrX2g2U0pEdTI2VllBamlCZWtlQ1dBblBUZ2ZHc0xBOVhGMkdHSlpyMzRfdTF6WW11S1VLczEyd2VSR0Z5LWVJblNLREFwN0tBQkkyZ3JHYTdlcms1c0ZYNEFBbFk2VUIzQl9tMW1rNmQyRQ&q=https%3A%2F%2Fwww.tag-connect.com%2Fsolutions-target-devices%2Fstm32&v=nkHFoxe0mrU)

[GIT] [https://www.github.com/pms67](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqa0lxSS1hVHhxd3RNXzY4SjJyNjlPaEk5LW96QXxBQ3Jtc0tsb3gxbjNZTmtCbExmM3pvR24zVzNXNDNHTTdvMS0yZTJVU2lEa0dOWWdSaGIzSnFObk1MTUc2dE16dFhmblZPUlpxQnZTdEdEV3pIeV8xcWc4dmJ4REgxM0VPQW1lT296SUMtZXphUEpib2pXcVZzWQ&q=https%3A%2F%2Fwww.github.com%2Fpms67&v=nkHFoxe0mrU)

[SOCIAL] Instagram: [ / philslabyt](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbGpzaXRnaVAyRDRjakp3TTd6Q3k3ZGlpQ1ZGUXxBQ3Jtc0tuZEFyQ0dLU1JKeWFrZU9ULWNpQlRrb1UzakY3SWxZUDZ0c2UyUXpaVTRTQjFVNmlQcHp4X2dfMWxNMDR3ZXlFbVlvc1hEMnc5cU95aDVhcUhQc1JQNW41dm4tbVp2dzFzYlp0YkstQVJFWDNPNzlMZw&q=https%3A%2F%2Fwww.instagram.com%2Fphilslabyt&v=nkHFoxe0mrU)

[LINKS] KiCad 7: [https://www.kicad.org/](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbWtldDF2NTVqT1ZWOXNzUlYwdHB2aklYU0k4QXxBQ3Jtc0tsZ0JJckRpNXVWRUh4Zmd3ZXRoT002Ri1YN05XdktzSUJCWXlwWnBOMzZZRlNpY2lOdWt4SGxMN1Bzc1RlYnZwbEJnTm91Z0xUVThUck1ZUVk4R045TjgxWThwRS1Ob25rVGJicEJHVHNlRFBHOVkxNA&q=https%3A%2F%2Fwww.kicad.org%2F&v=nkHFoxe0mrU)

STM32CubeIDE: [https://www.st.com/en/development-too...](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbklmQ3VUMTRoMWdUcGVfVGVYZUJBUjY1UnFHQXxBQ3Jtc0trNnlUWk01ZVJHRHV1akx6Z0xaZnZsNUFWaFJWMm9XODhMRlFPUWhoVk9VRlZBZktRTU9qRFkwbHNmUmpyWUh6OWNEdmxGRl9Hdm9xTlBEOU9Ob05CUGxmR0FGM1FoN1NyS0JJUDVTdXpZbm5ILUZ6VQ&q=https%3A%2F%2Fwww.st.com%2Fen%2Fdevelopment-tools%2Fstm32cubeide.html&v=nkHFoxe0mrU)

MCU Datasheet: [https://www.st.com/resource/en/datash...](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbTJPcmRyQ1Z2eUpJdjVQUkFWVlV1WlBuNEdlZ3xBQ3Jtc0trYm5QTGx5LWV3RTJ2bW14R0hCTy1uaG9VR294UjM4U2ZyM1RiS3FKUS13QTZlWjhlWUNxRkE5a1hlT0xlUkFkQ04wd2VsVGFSUDZ0MURsekc0ZVkzekZhWjV1SXBoR0w3V2JMaTdBRUZqa3p5N0dPYw&q=https%3A%2F%2Fwww.st.com%2Fresource%2Fen%2Fdatasheet%2Fstm32wb55ce.pdf&v=nkHFoxe0mrU)

AN5165: [https://www.st.com/resource/en/applic...](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbnZ0V00zQ0pIQjlsYVpnMktRMHJ0RVpIQWozQXxBQ3Jtc0trNkREUU9pbzU4Rmw3cUxpWTg2ZWJxbmhYQnV0eml3LUdhc1d1SnB6dmhVTXFyM1R3VWhYYmVyTnFMMW4tVnJRNVpQZUZvWk9OZ0pLLVBPRjR6LWtrODl1aE9KYW1CLXNVM0Z3NGlmbFkxcGtYWGdCbw&q=https%3A%2F%2Fwww.st.com%2Fresource%2Fen%2Fapplication_note%2Fan5165-how-to-develop-rf-hardware-using-stm32wb-microcontrollers-stmicroelectronics.pdf&v=nkHFoxe0mrU)

AN2867: [https://www.st.com/resource/en/applic...](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqa0ZRbGFuOUloUncwWGh6Nll4blZkUkdPMTVEd3xBQ3Jtc0tsWHdTS3pPZmhzbGhwaHR2dTNENU5LbjgwdWc5dE9nVXJXbHJrSWJJTFpsQ0VLQjhoSEZLZUdHSGxwLU5OWUI5MW1nZHVMM0xhd25DNWdTQkUxbUlKSFU3TlJDQjRYeUFLZXY3ejBFWDRkS2E5NkpNaw&q=https%3A%2F%2Fwww.st.com%2Fresource%2Fen%2Fapplication_note%2Fan2867-oscillator-design-guide-for-stm8afals-stm32-mcus-and-mpus-stmicroelectronics.pdf&v=nkHFoxe0mrU)

Hardware Design Playlist (Best for Basic Electronics): [ • Hardware Design](https://www.youtube.com/playlist?list=PLXSyc11qLa1YhVCZ5xWPuPsE5MkgEy5TF)